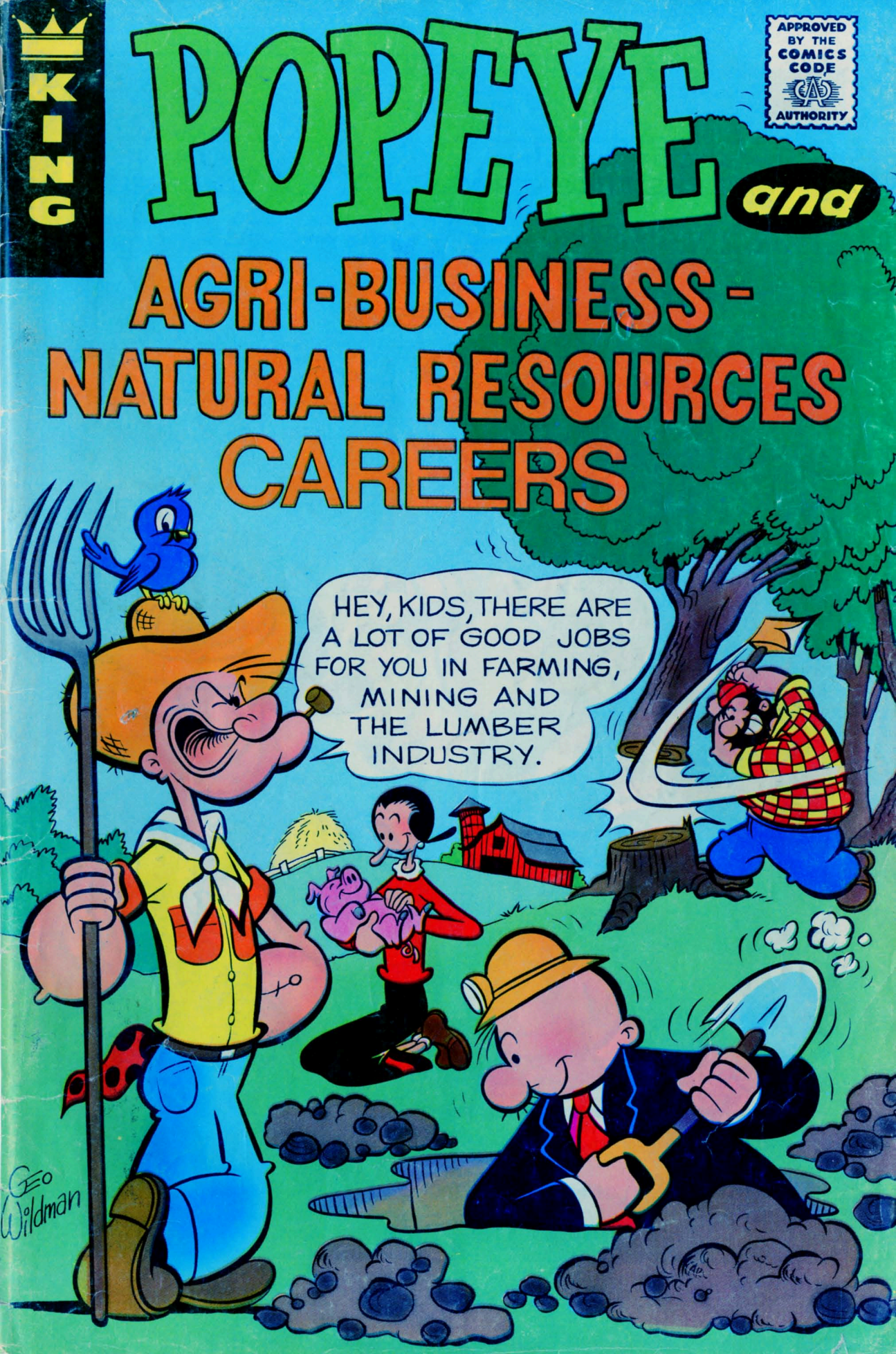
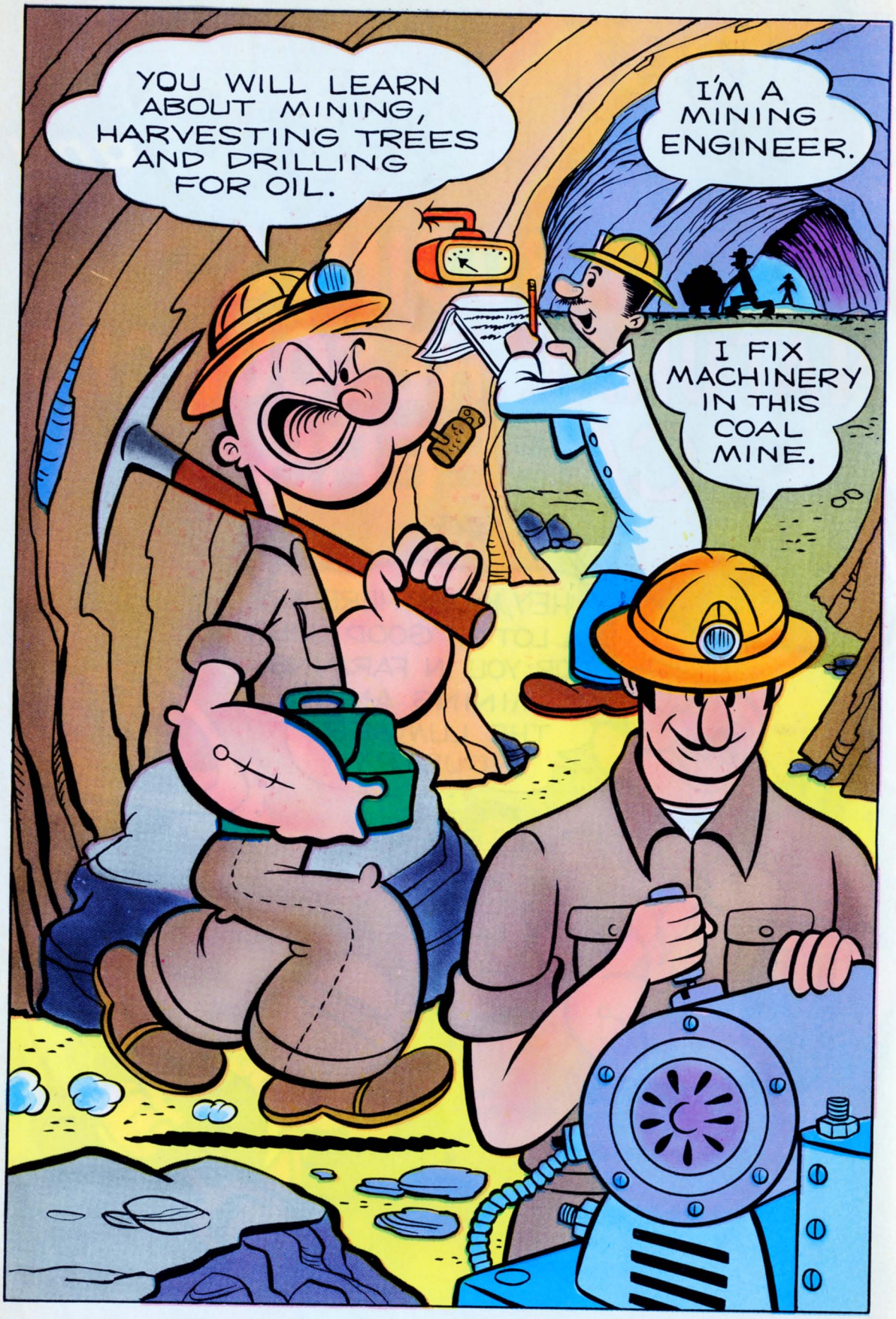
KING

POPEYE and AGRI-BUSINESS - NATURAL RESOURCES CAREERS

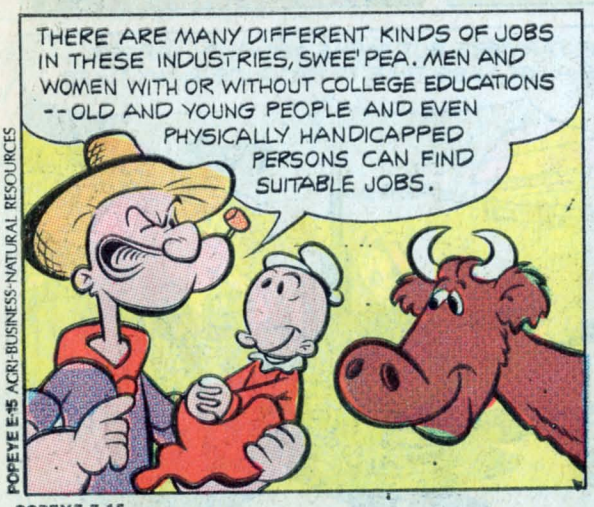
APPROVED BY THE COMICS CODE AUTHORITY

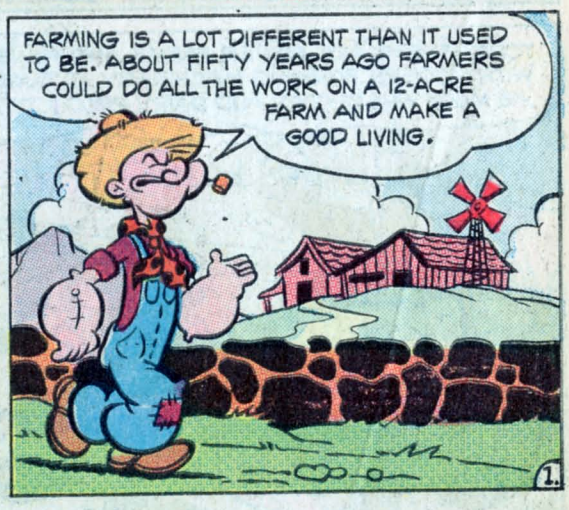



YOU WILL LEARN ABOUT MINING, HARVESTING TREES AND DRILLING FOR OIL.
I'M A MINING ENGINEER.
I FIX MACHINERY IN THIS COAL MINE.

GOLLY, POPEYE, FARMERS, MINERS AND LUMBERMEN DON'T HAVE THE SAME KINDS OF JOBS!

THEY ARE ALL WORKING TO GET A PRODUCT FROM THE EARTH, SWEE'PEA. THE MINERS REMOVE VARIOUS METALS, OIL AND NATURAL GAS. LUMBERMEN HARVEST TREES WHICH GROW FROM THE EARTH AND FARMERS PRODUCE FOOD GROWN IN THE GROUND.





POPEYE E-15 AGRI-BUSINESS-NATURAL RESOURCES

POPEYE E-15
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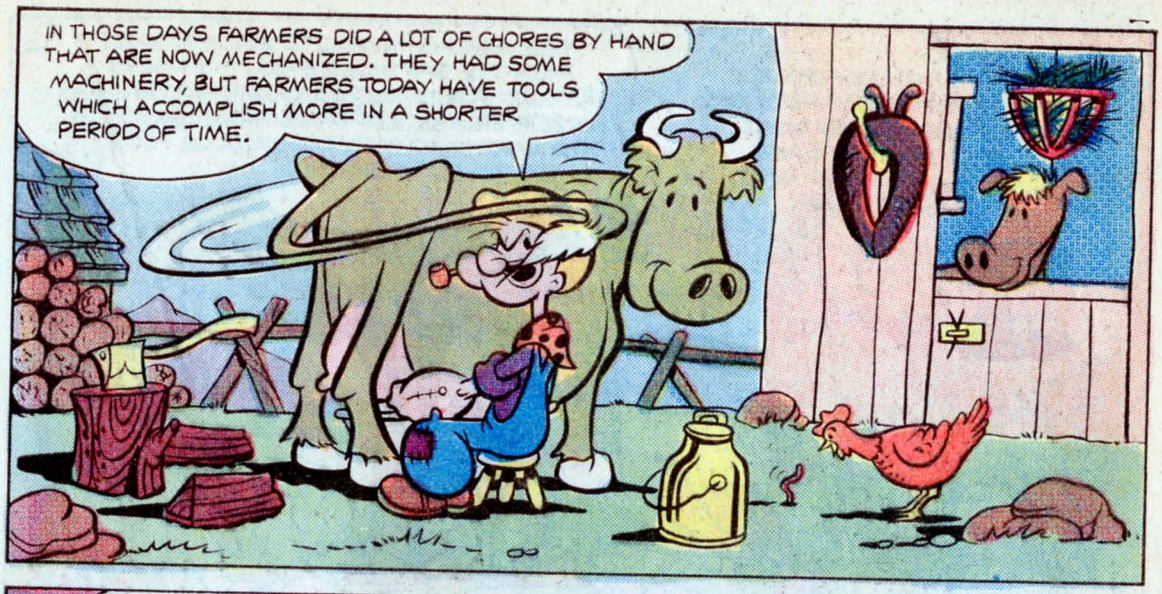
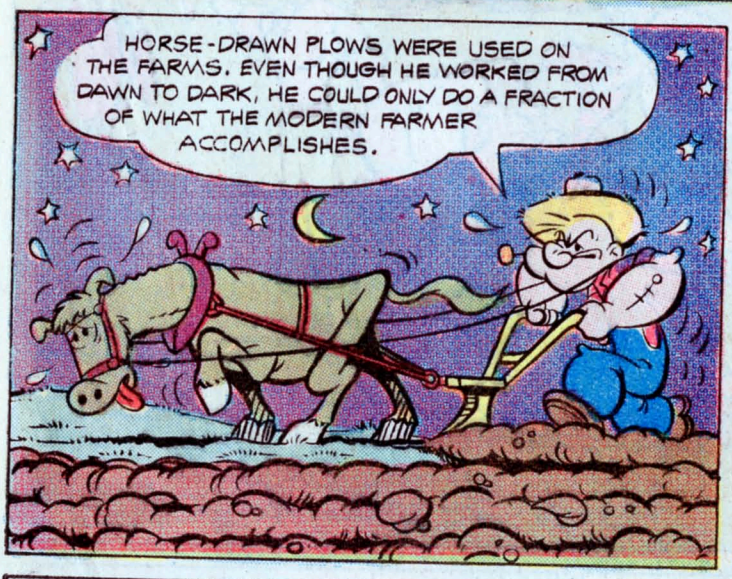
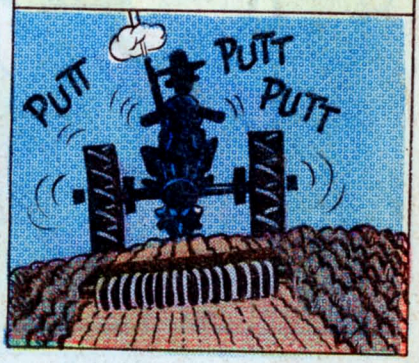
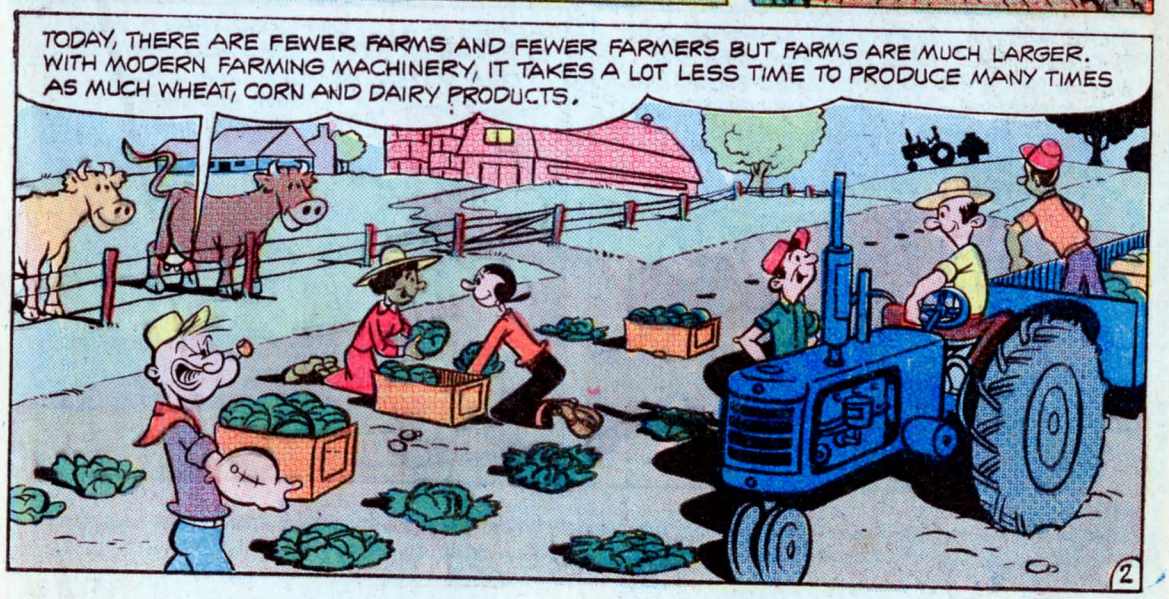
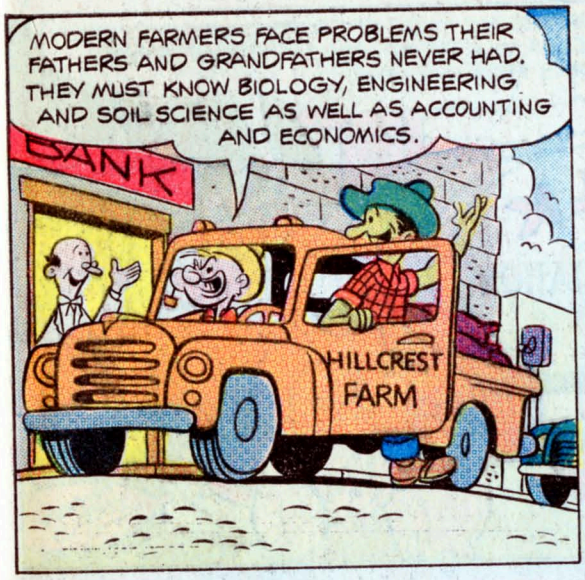


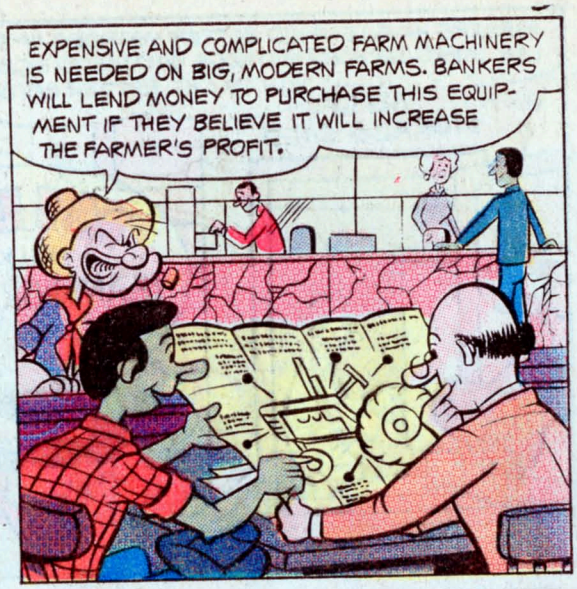


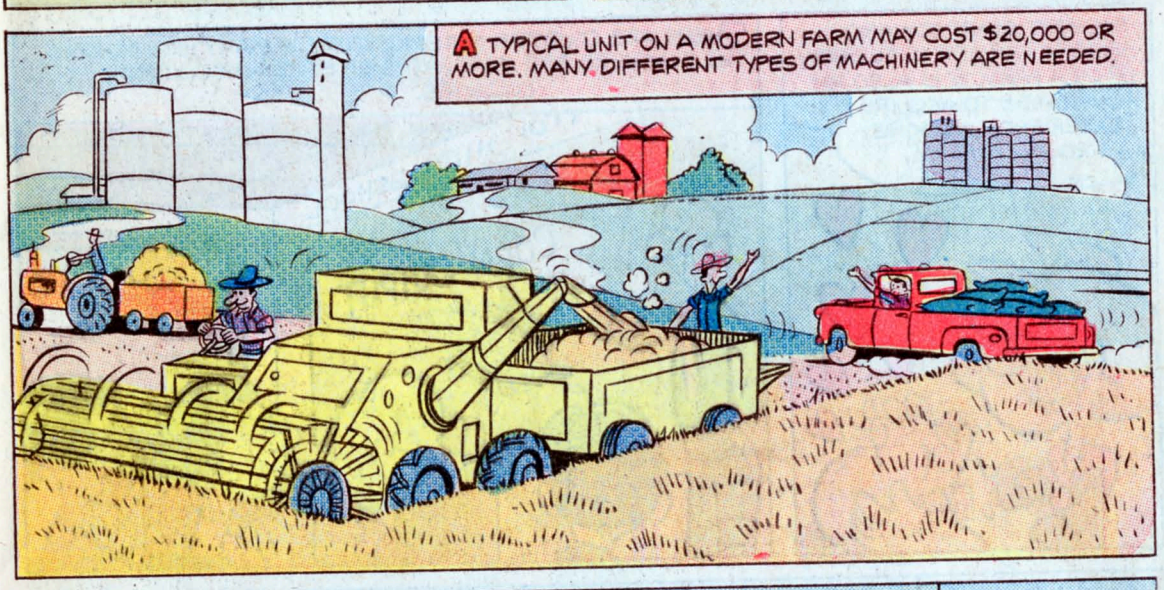
WHEN FARMERS BEGAN USING FARM TRACTORS INSTEAD OF HORSES, THEY COULD PLOW TWO ROWS OR MORE AT A TIME AND THEY WERE ABLE TO WORK BIGGER FARMS.

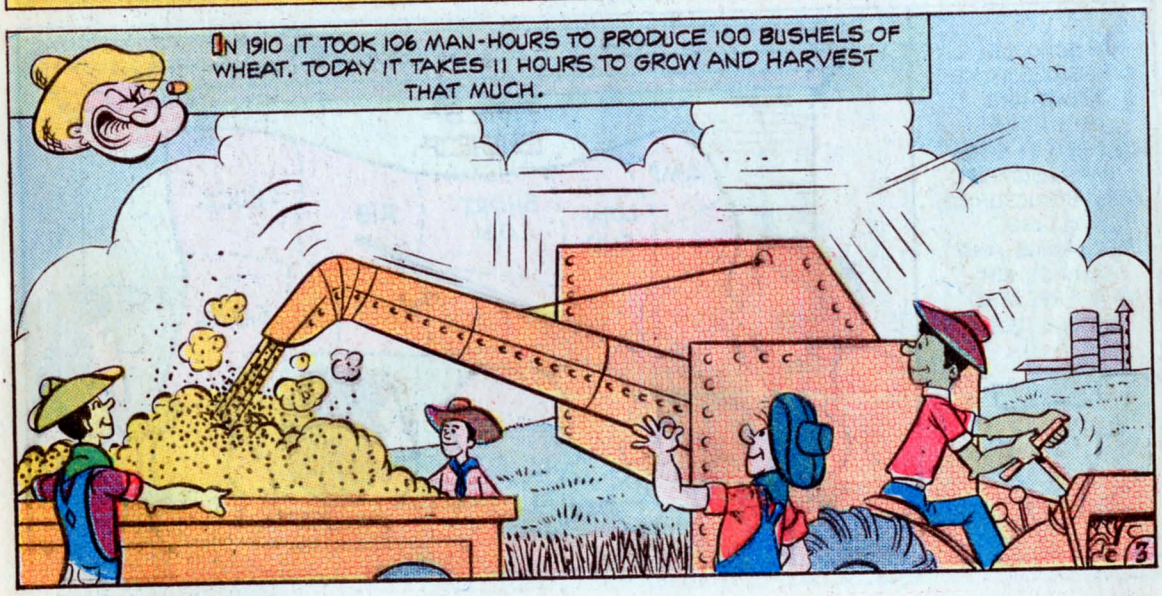





MODERN FARMERS FACE PROBLEMS THEIR FATHERS AND GRANDFATHERS NEVER HAD. THEY MUST KNOW BIOLOGY, ENGINEERING AND SOIL SCIENCE AS WELL AS ACCOUNTING AND ECONOMICS.
BANK
HILLCREST FARM


EXPENSIVE AND COMPLICATED FARM MACHINERY IS NEEDED ON BIG, MODERN FARMS. BANKERS WILL LEND MONEY TO PURCHASE THIS EQUIPMENT IF THEY BELIEVE IT WILL INCREASE THE FARMER'S PROFIT.


A TYPICAL UNIT ON A MODERN FARM MAY COST $20,000 OR MORE. MANY DIFFERENT TYPES OF MACHINERY ARE NEEDED.


IN 1910 IT TOOK 106 MAN-HOURS TO PRODUCE 100 BUSHELS OF WHEAT. TODAY IT TAKES 11 HOURS TO GROW AND HARVEST THAT MUCH.

FARMERS HAVE LEARNED BETTER METHODS OF RAISING ALL KINDS OF CROPS. DAIRY FARMERS USE IMPROVED FEED METHODS ON COWS TO INCREASE MILK OUTPUT. POULTRY FARMERS KNOW HOW TO GET BETTER RETURNS FROM CHICKENS.

MILK STORAGE SHED

MILK BULK TRANSPORTATION

MILK

CHICKEN FEED

CHICKEN FEED

THE BEST START TOWARD BEING A FARMER IS TO GROW UP ON A FARM. IT IS ALSO AN ADVANTAGE TO ACQUIRE EXPERIENCE WORKING AROUND A FARM.

THERE ARE COURSES IN AGRICULTURE IN MANY HIGH SCHOOLS. THE TEACHERS ARE GRADUATES OF STATE AGRICULTURAL COLLEGES.

HIGH SCHOOL

CORN OUTPUT

IN SCHOOLS OF AGRICULTURE — THERE ARE INTENSIVE — COURSES IN FARM MANAGEMENT, FARM STRUCTURES, WELDING, MECHANICS AND MANY OTHER FARM-RELATED SPECIALTIES.

COLLEGE OF AGRICULTURE

PORK LAMB

SIDE OF BEEF

RUMP

LOIN END

SHORT LOIN

RIB

CHUCK

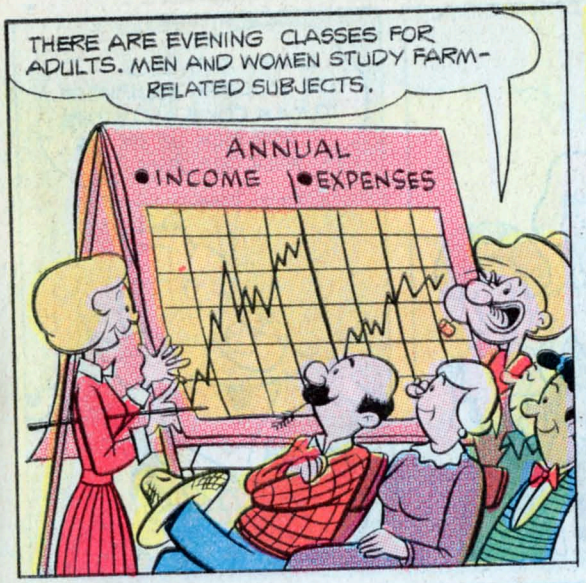
ROUND

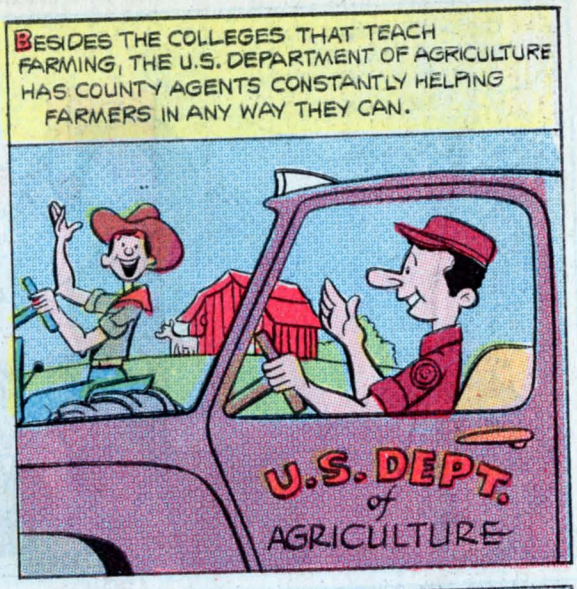
FLANK

PLATE

BRISKET

SHANK

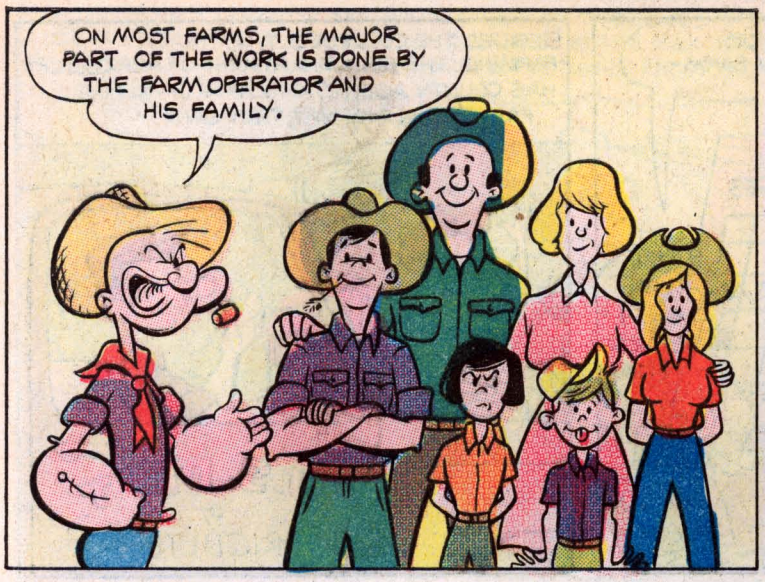


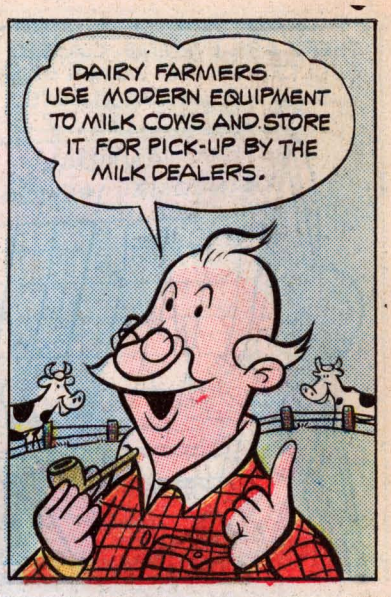


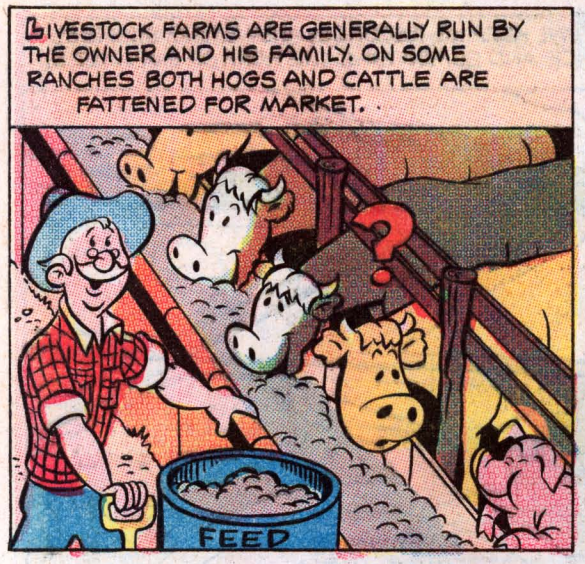
MODERN FARMERS MUST SPEND MUCH OF THEIR TIME KEEPING RECORDS, ANSWERING BUSINESS LETTERS, ARRANGING FOR FINANCE AND SUPERVISING THE WORK OF EMPLOYEES.

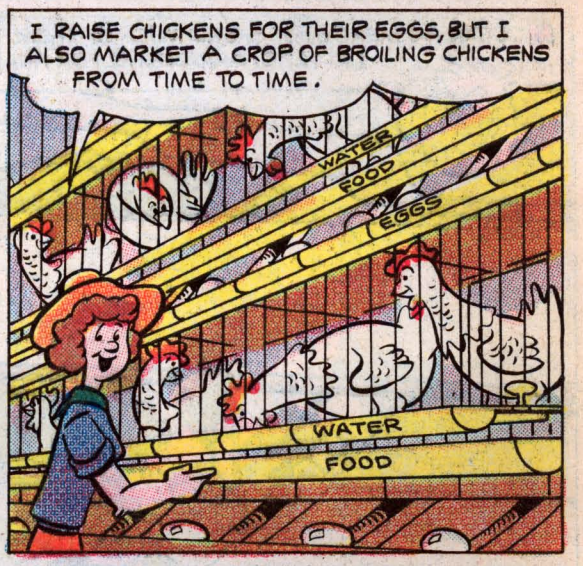
FARMERS MUST HAVE A KNOWLEDGE OF BUSINESS METHODS AND ACCOUNTING AS WELL AS BIOLOGY, ENGINEERING AND OTHER SKILLS.

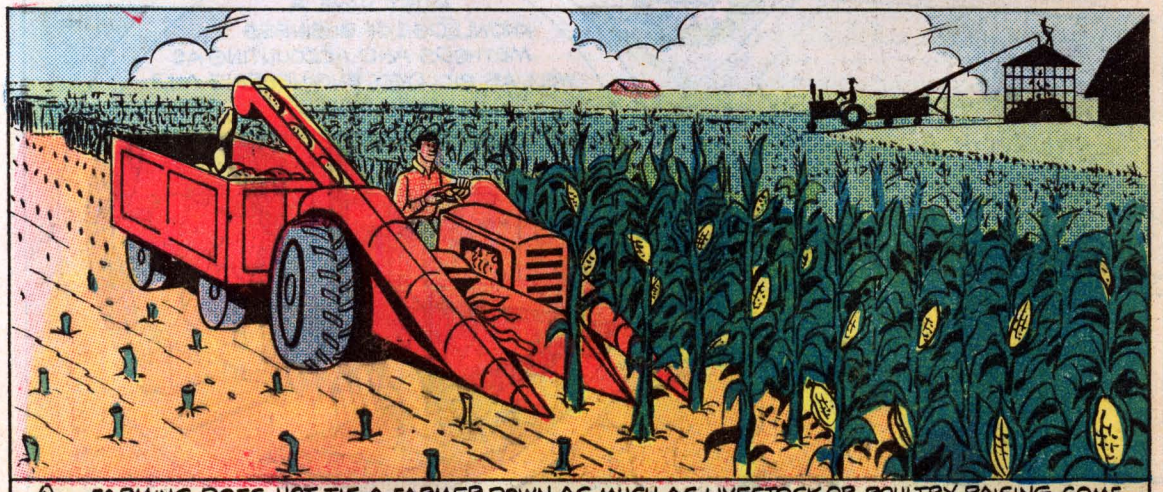
CORN WHEAT PASTURE RYE CORN



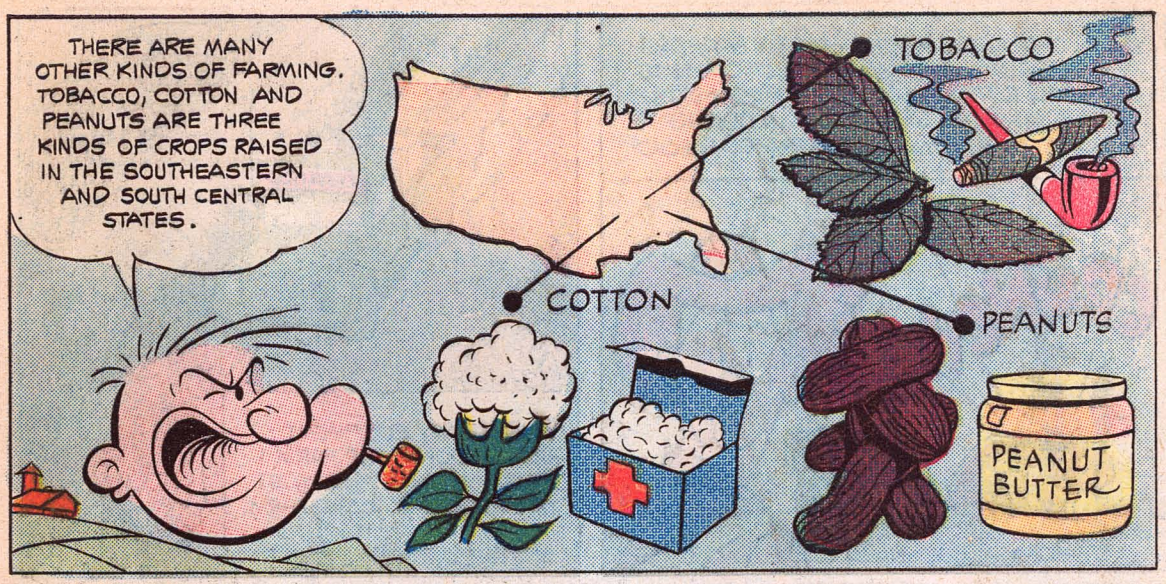


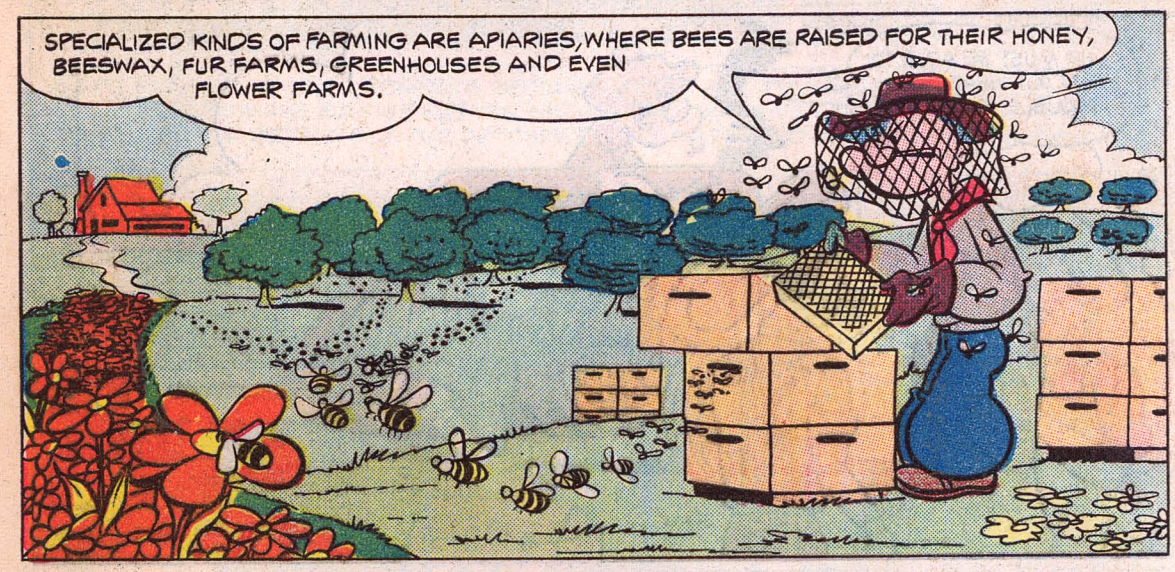


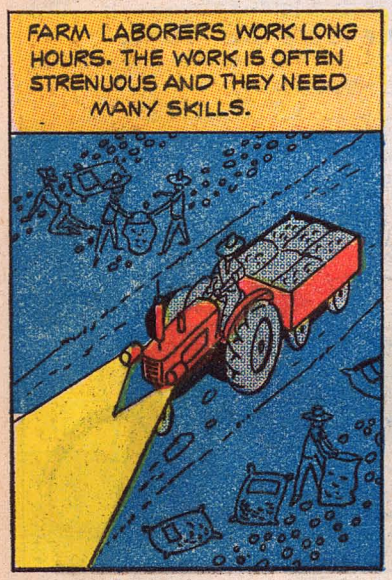




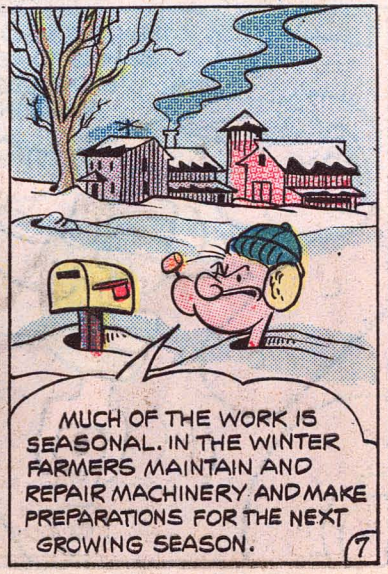
ALL FARMING DOES NOT TIE A FARMER DOWN AS MUCH AS LIVESTOCK OR POULTRY RAISING. SOME FARMERS WORK LONG DAYS WITH LARGE LABORSAVING EQUIPMENT DURING BUSY SEASONS, BUT THEY HAVE LONG SLACK PERIODS DURING WHICH THEY HAVE TIME OFF.

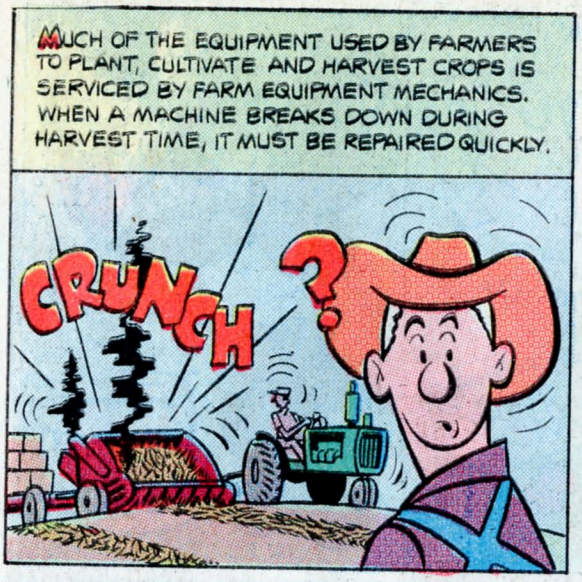

THERE ARE MANY OTHER KINDS OF FARMING. TOBACCO, COTTON AND PEANUTS ARE THREE KINDS OF CROPS RAISED IN THE SOUTHEASTERN AND SOUTH CENTRAL STATES.
TOBACCO
COTTON
PEANUTS
PEANUT BUTTER

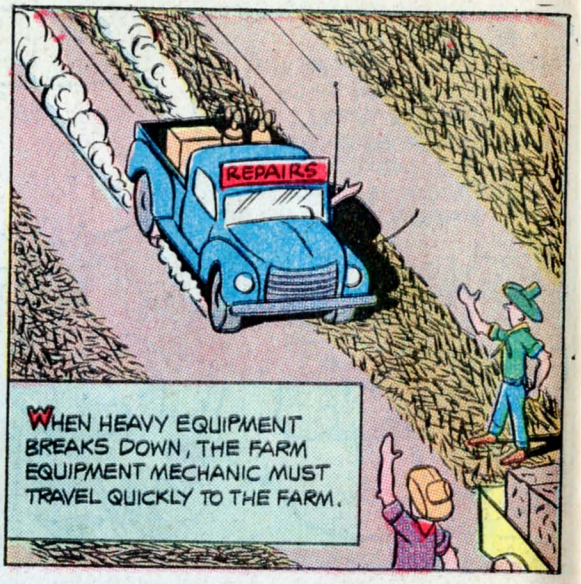

SPECIALIZED KINDS OF FARMING ARE APIARIES, WHERE BEES ARE RAISED FOR THEIR HONEY, BEESWAX, FUR FARMS, GREENHOUSES AND EVEN FLOWER FARMS.

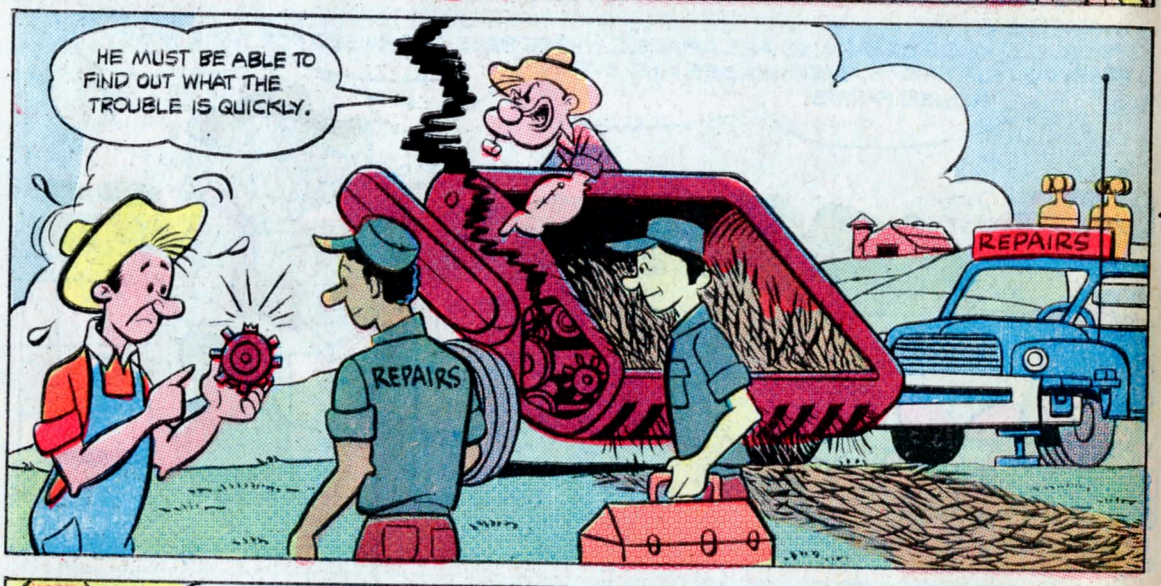

FARM LABORERS WORK LONG HOURS. THE WORK IS OFTEN STRENUOUS AND THEY NEED MANY SKILLS.

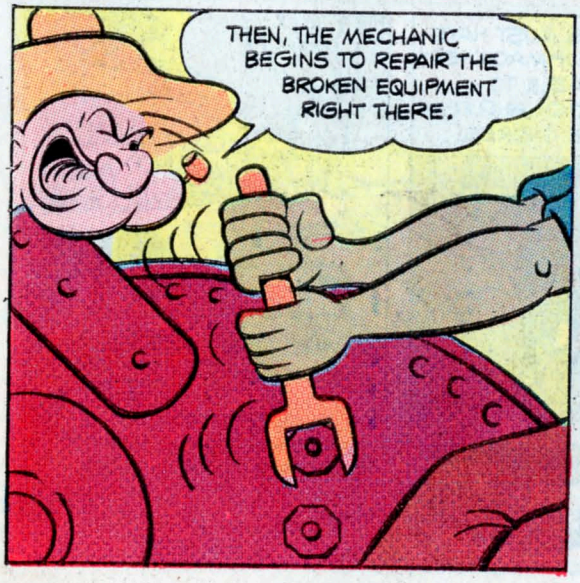
FARM LABORERS MUST HAVE A KNOWLEDGE OF MACHINERY AS WELL AS BE ABLE TO HANDLE LIVESTOCK AND PERFORM ROUTINE CHORES.

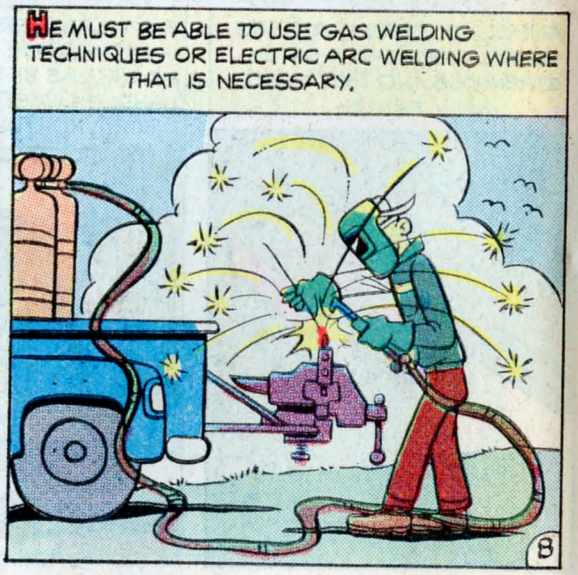

MUCH OF THE WORK IS SEASONAL. IN THE WINTER FARMERS MAINTAIN AND REPAIR MACHINERY AND MAKE PREPARATIONS FOR THE NEXT GROWING SEASON.


MUCH OF THE EQUIPMENT USED BY FARMERS TO PLANT, CULTIVATE AND HARVEST CROPS IS SERVICED BY FARM EQUIPMENT MECHANICS. WHEN A MACHINE BREAKS DOWN DURING HARVEST TIME, IT MUST BE REPAIRED QUICKLY.
CRUNCH
?

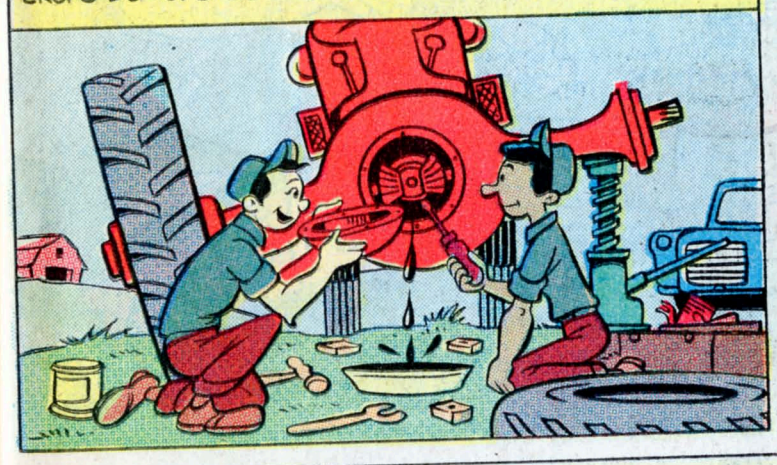

REPAIRS
WHEN HEAVY EQUIPMENT BREAKS DOWN, THE FARM EQUIPMENT MECHANIC MUST TRAVEL QUICKLY TO THE FARM.


HE MUST BE ABLE TO FIND OUT WHAT THE TROUBLE IS QUICKLY.
REPAIRS
REPAIRS

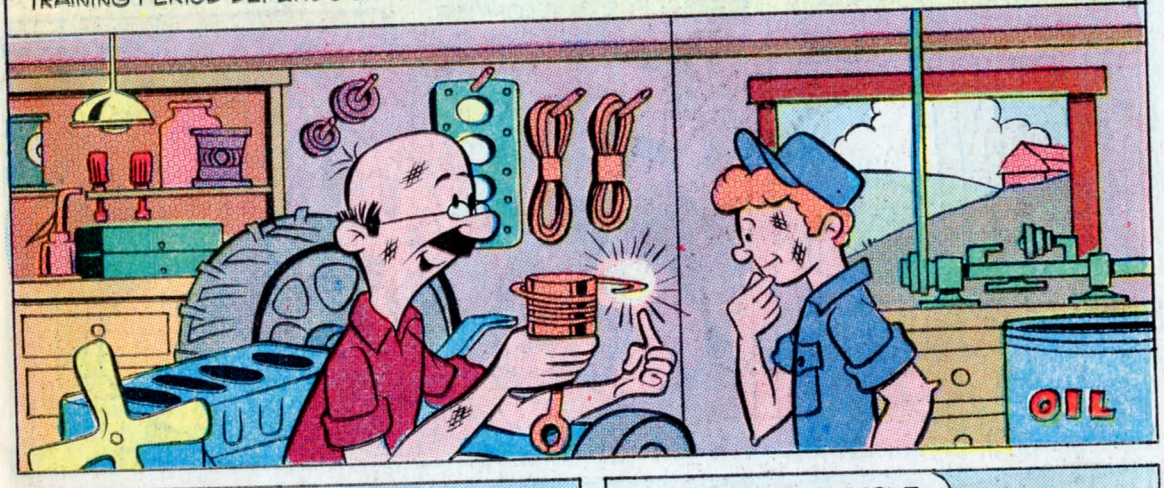

THEN, THE MECHANIC BEGINS TO REPAIR THE BROKEN EQUIPMENT RIGHT THERE.


HE MUST BE ABLE TO USE GAS WELDING TECHNIQUES OR ELECTRIC ARC WELDING WHERE THAT IS NECESSARY.

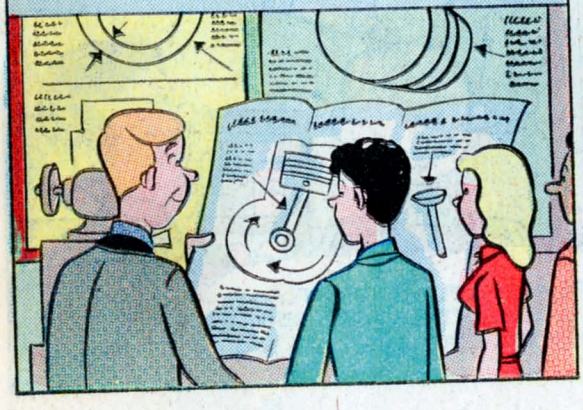
THESE HIGHLY SKILLED WORKERS MAY HAVE TO REPAIR A TRANSMISSION OR OVERHAUL AN ENGINE COMPLETELY. IT IS IMPORTANT THAT THESE REPAIRS BE MADE QUICKLY SO THAT RIPENING CROPS DO NOT SPOIL BEFORE THEY ARE HARVESTED.

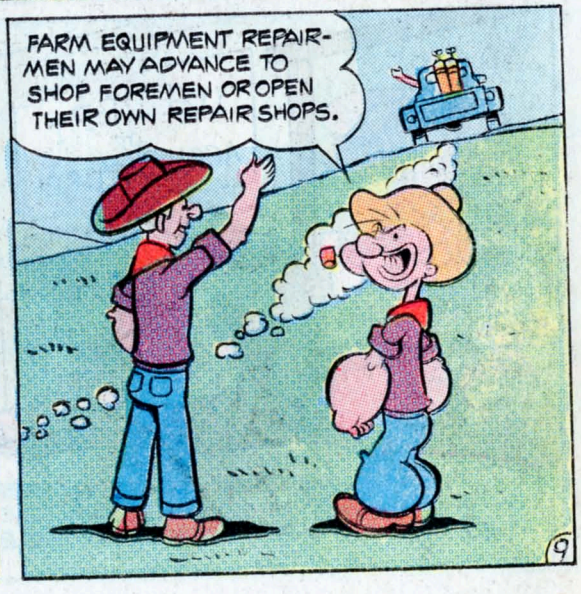


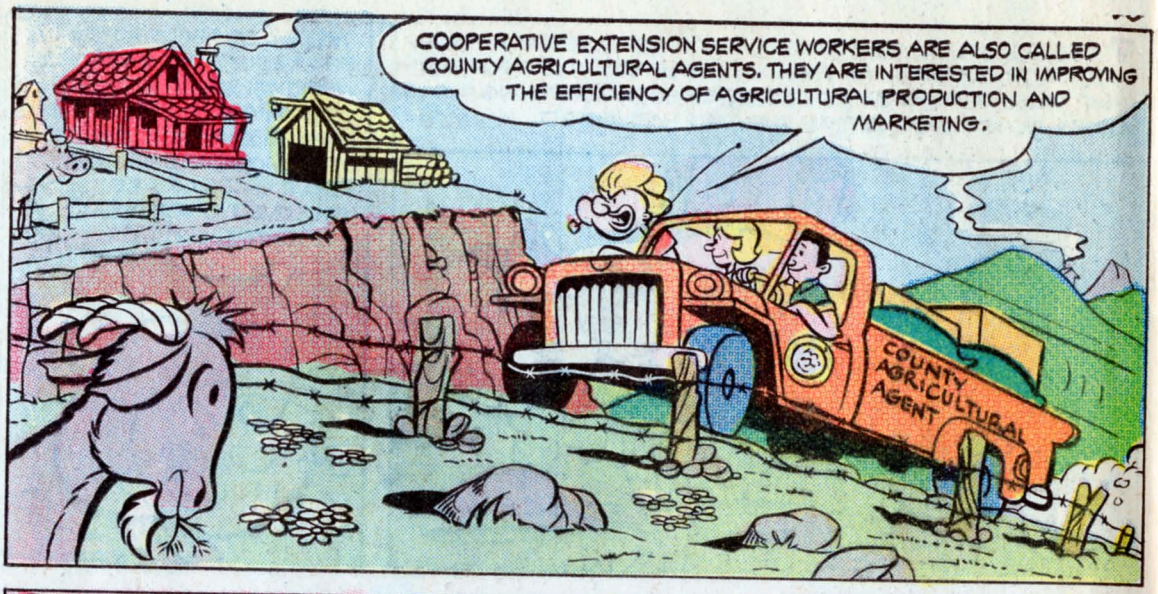
MOST FARM EQUIPMENT MECHANICS BEGIN AS HELPERS TO EXPERIENCED MECHANICS. THEY ASSIST THEM TO MAKE ROUTINE REPAIRS AND HELP ASSEMBLE NEW FARM EQUIPMENT. THEIR TRAINING PERIOD DEPENDS ON THE APTITUDE OF THE HELPER AND HIS PREVIOUS EXPERIENCE.



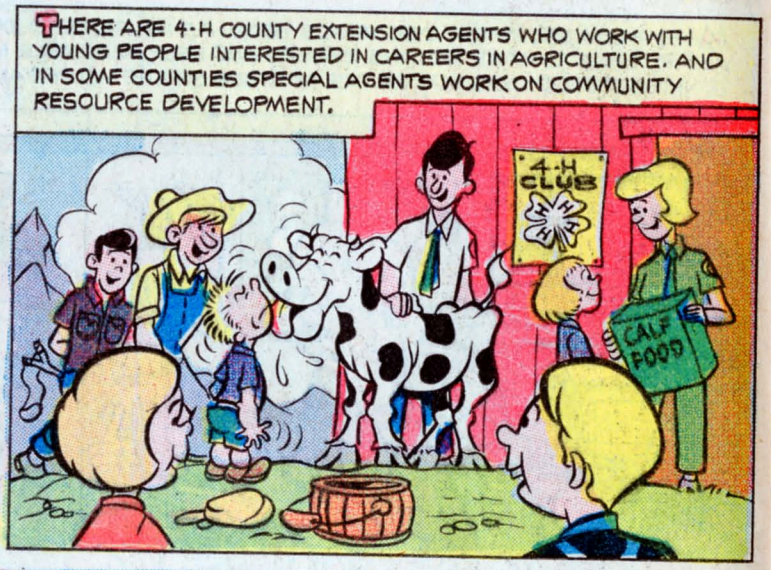
SOME MECHANICS LEARN THEIR TRADE BY COMPLETING AN APPRENTICESHIP TRAINING PROGRAM IN A LARGE REPAIR SHOP. THESE PROGRAMS LAST FROM 3 TO 4 YEARS AND INCLUDE ON-THE-JOB TRAINING IN ALL PHASES OF MAINTENANCE AND REPAIR.

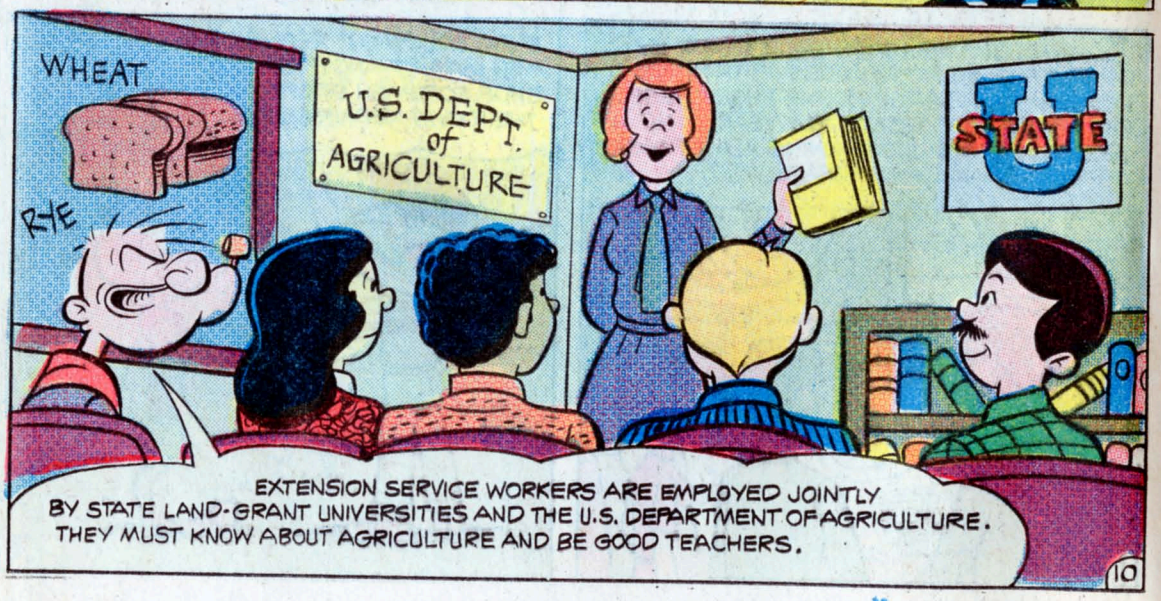


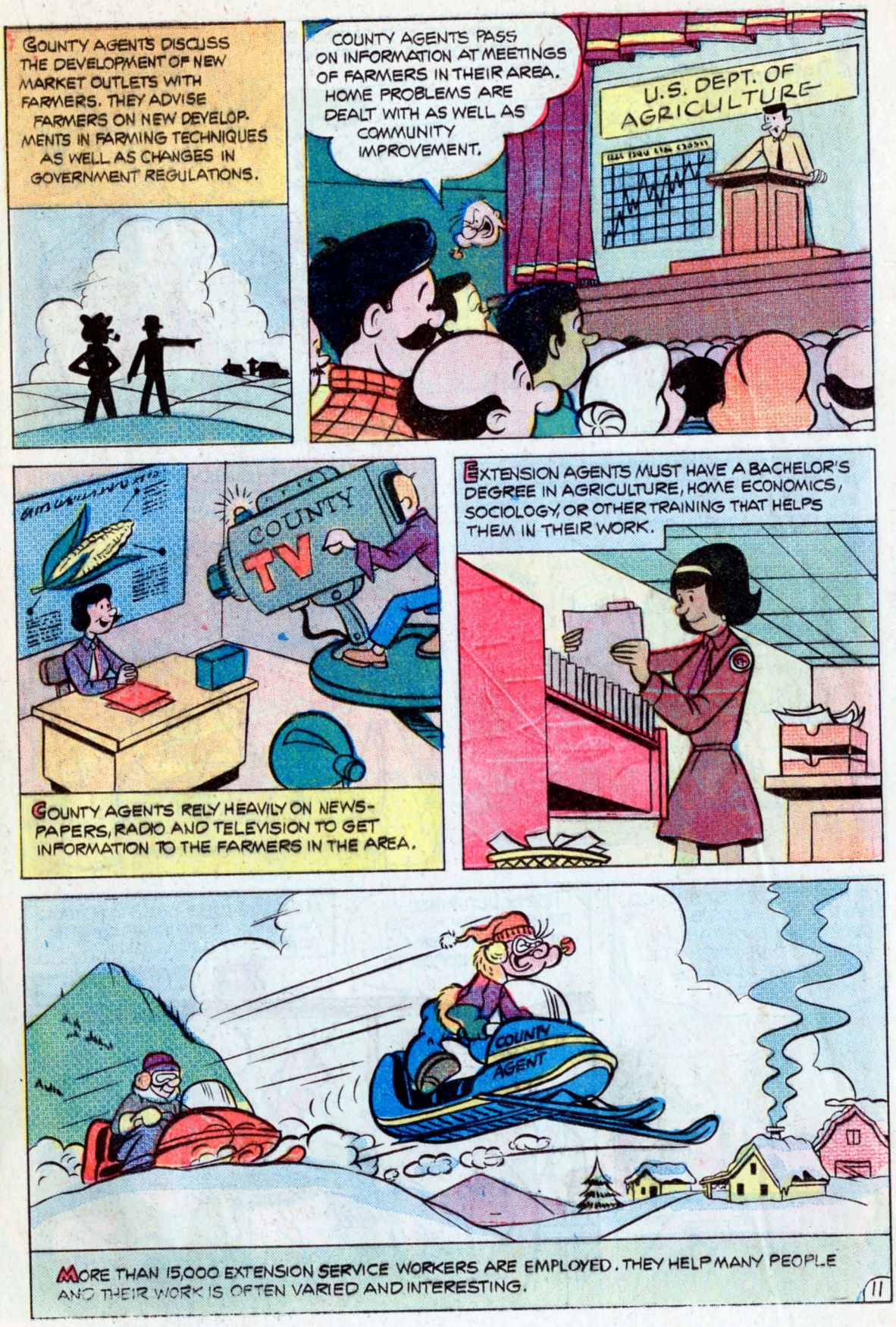


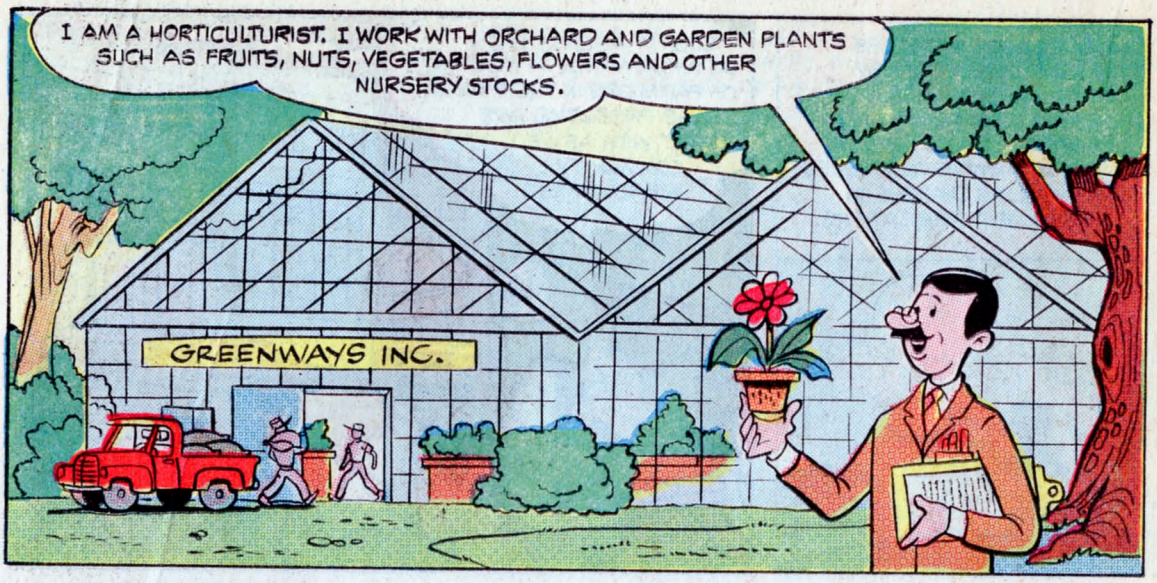

COOPERATIVE EXTENSION SERVICE WORKERS ARE ALSO CALLED COUNTY AGRICULTURAL AGENTS. THEY ARE INTERESTED IN IMPROVING THE EFFICIENCY OF AGRICULTURAL PRODUCTION AND MARKETING.
COUNTY AGRICULTURAL AGENT

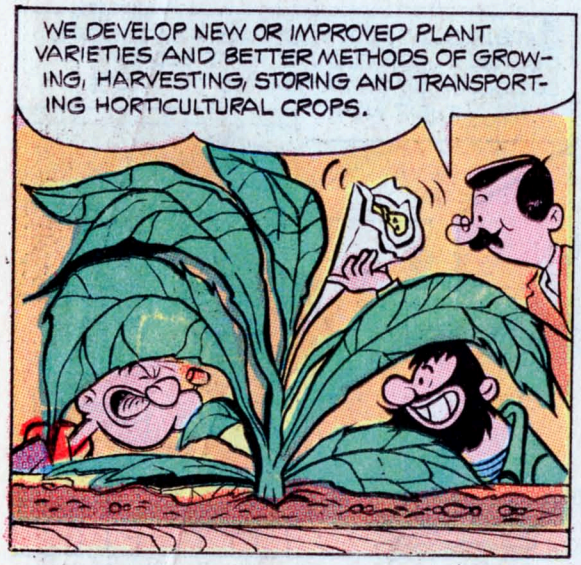
COUNTY HOME ECONOMICS AGENTS WORK CLOSELY WITH WOMEN IN HOME MANAGEMENT, NUTRITION AND OTHER PHASES OF FAMILY LIVING.

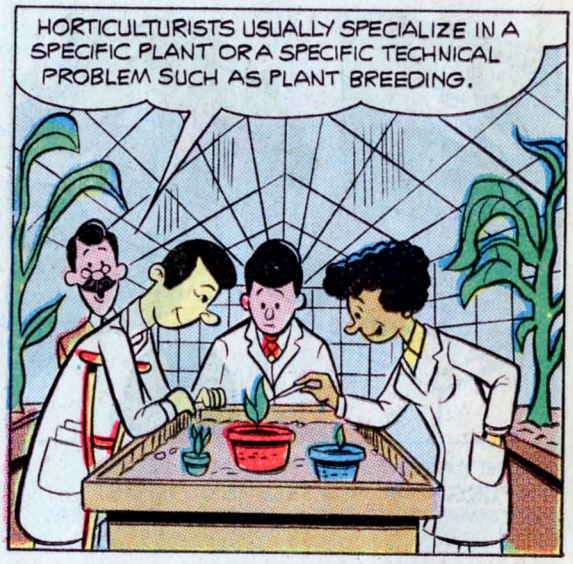

THERE ARE 4-H COUNTY EXTENSION AGENTS WHO WORK WITH YOUNG PEOPLE INTERESTED IN CAREERS IN AGRICULTURE. AND IN SOME COUNTIES SPECIAL AGENTS WORK ON COMMUNITY RESOURCE DEVELOPMENT.
4-H CLUB
CALF FOOD

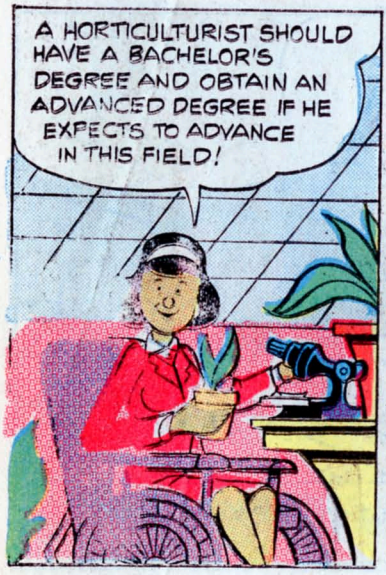

WHEAT
RYE
U.S. DEPT. of AGRICULTURE
STATE U
EXTENSION SERVICE WORKERS ARE EMPLOYED JOINTLY BY STATE LAND-GRANT UNIVERSITIES AND THE U.S. DEPARTMENT OF AGRICULTURE. THEY MUST KNOW ABOUT AGRICULTURE AND BE GOOD TEACHERS.

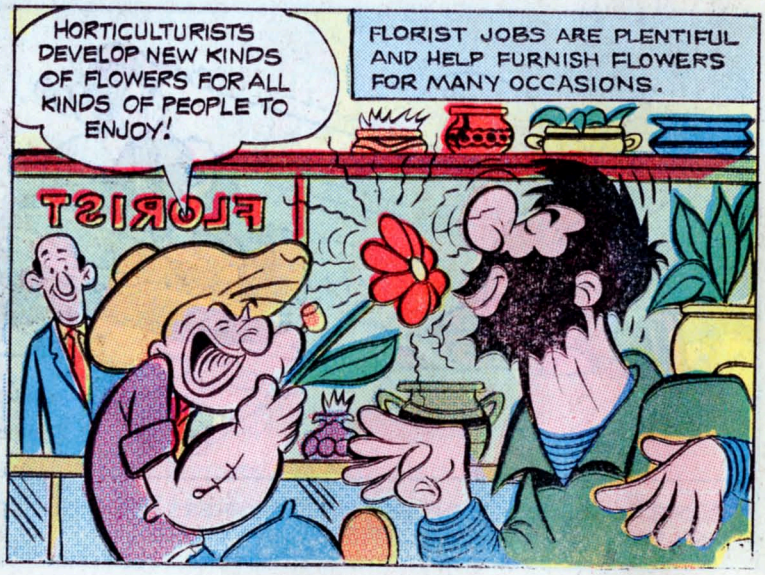

COUNTY AGENTS DISCUSS THE DEVELOPMENT OF NEW MARKET OUTLETS WITH FARMERS. THEY ADVISE FARMERS ON NEW DEVELOPMENTS IN FARMING TECHNIQUES AS WELL AS CHANGES IN GOVERNMENT REGULATIONS.
COUNTY AGENTS PASS ON INFORMATION AT MEETINGS OF FARMERS IN THEIR AREA. HOME PROBLEMS ARE DEALT WITH AS WELL AS COMMUNITY IMPROVEMENT.
U.S. DEPT. OF AGRICULTURE
COUNTY TV
COUNTY AGENTS RELY HEAVILY ON NEWSPAPERS, RADIO AND TELEVISION TO GET INFORMATION TO THE FARMERS IN THE AREA.
EXTENSION AGENTS MUST HAVE A BACHELOR'S DEGREE IN AGRICULTURE, HOME ECONOMICS, SOCIOLOGY, OR OTHER TRAINING THAT HELPS THEM IN THEIR WORK.
COUNTY AGENT
MORE THAN 15,000 EXTENSION SERVICE WORKERS ARE EMPLOYED. THEY HELP MANY PEOPLE AND THEIR WORK IS OFTEN VARIED AND INTERESTING.
11

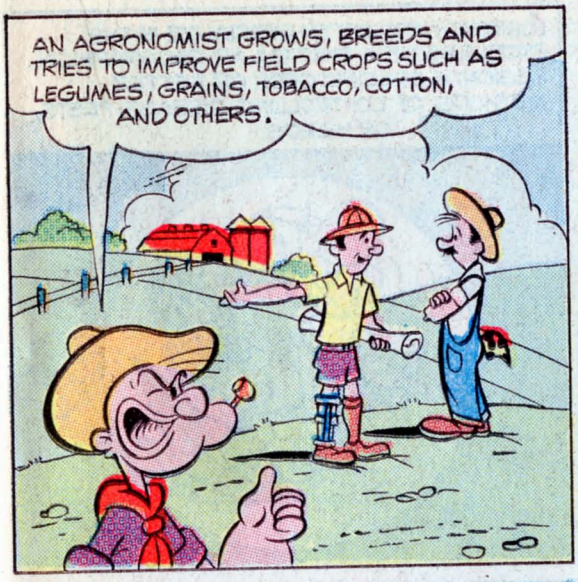

I AM A HORTICULTURIST. I WORK WITH ORCHARD AND GARDEN PLANTS SUCH AS FRUITS, NUTS, VEGETABLES, FLOWERS AND OTHER NURSERY STOCKS.
GREENWAYS INC.

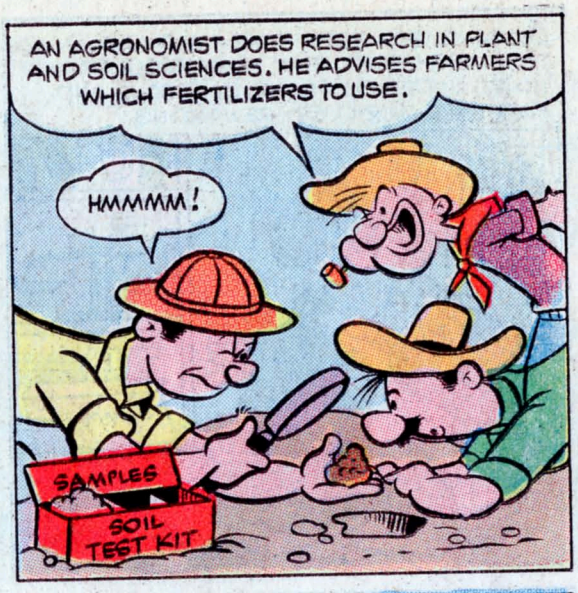

WE DEVELOP NEW OR IMPROVED PLANT VARIETIES AND BETTER METHODS OF GROWING, HARVESTING, STORING AND TRANSPORTING HORTICULTURAL CROPS.

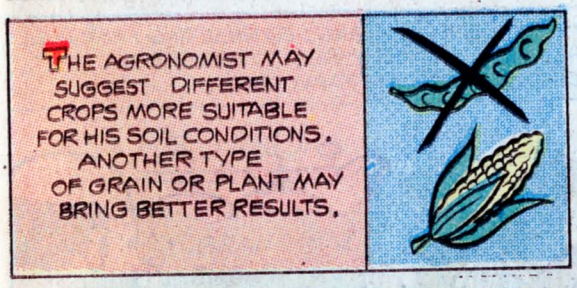

HORTICULTURISTS USUALLY SPECIALIZE IN A SPECIFIC PLANT OR A SPECIFIC TECHNICAL PROBLEM SUCH AS PLANT BREEDING.

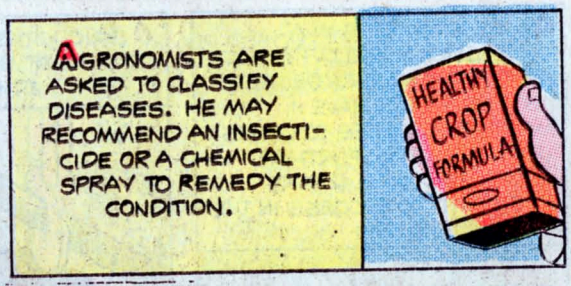

A HORTICULTURIST SHOULD HAVE A BACHELOR'S DEGREE AND OBTAIN AN ADVANCED DEGREE IF HE EXPECTS TO ADVANCE IN THIS FIELD!

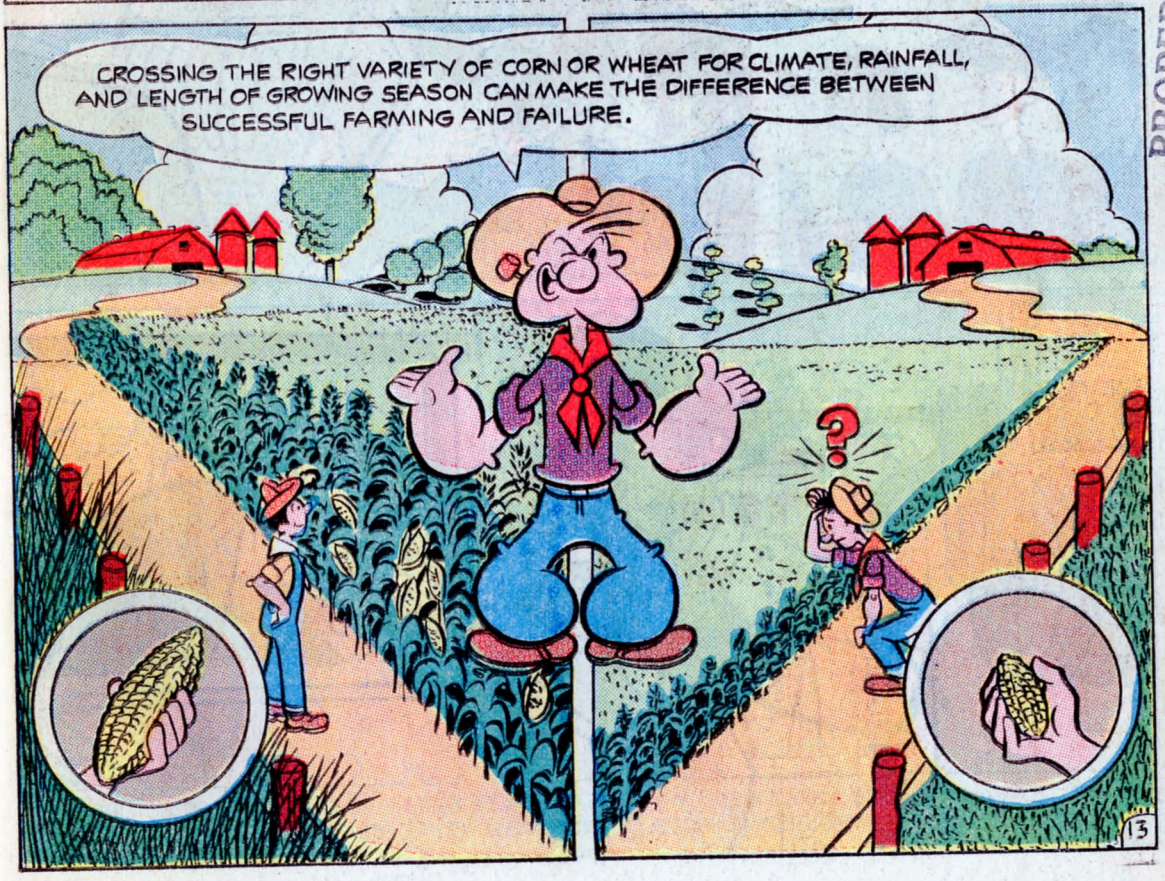

HORTICULTURISTS DEVELOP NEW KINDS OF FLOWERS FOR ALL KINDS OF PEOPLE TO ENJOY!
FLORIST JOBS ARE PLENTIFUL AND HELP FURNISH FLOWERS FOR MANY OCCASIONS.
FLORIST





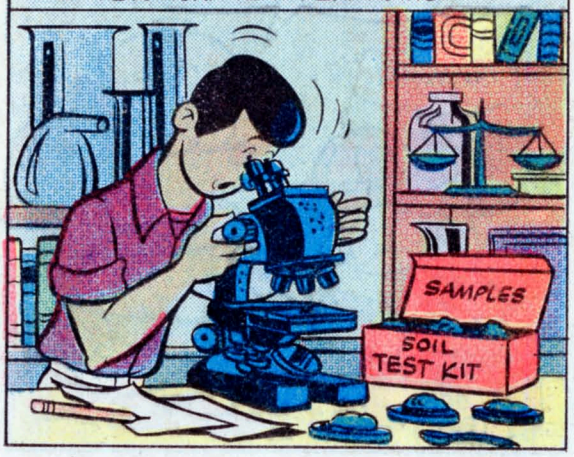




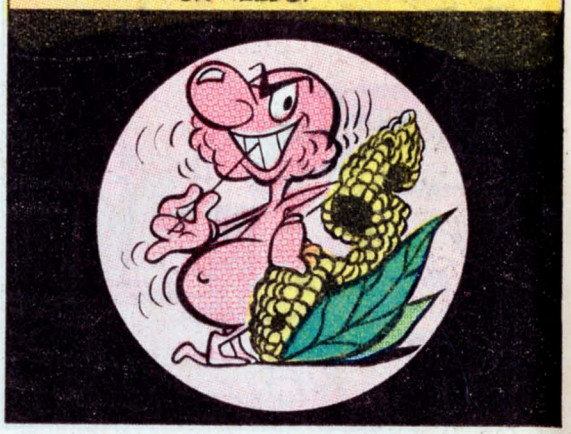


PROPERTY OF
MIDDLE SCHOOL
GUIDANCE DEPARTMENT

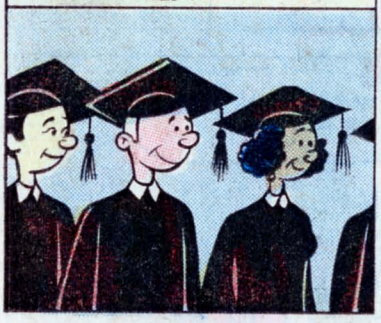
AGRONOMISTS WORK IN THE FIELD AND THE LABORATORY. THEY WORK REGULAR HOURS UNDER PLEASANT CONDITIONS AND FIND THEIR WORK VERY REWARDING.



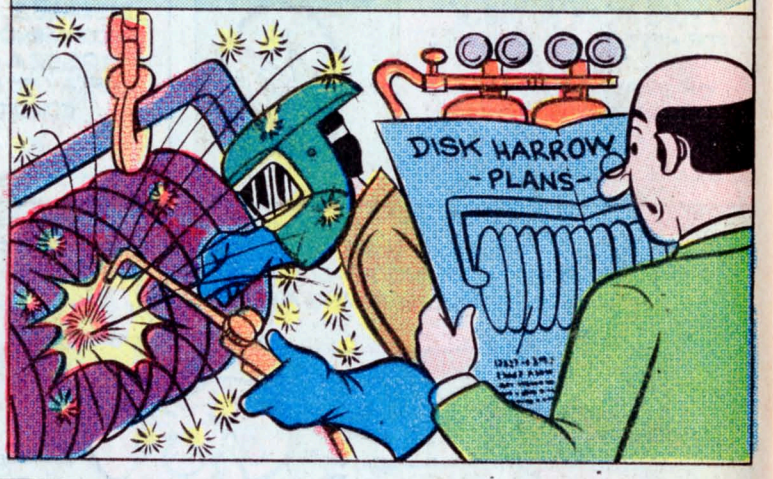
AGRONOMISTS OFTEN SPECIALIZE IN THE PROBLEMS OF A PARTICULAR GEOGRAPHICAL REGION, A SPECIFIC CROP, OR BETTER METHODS OF CONTROLLING DISEASE, PESTS, OR WEEDS.



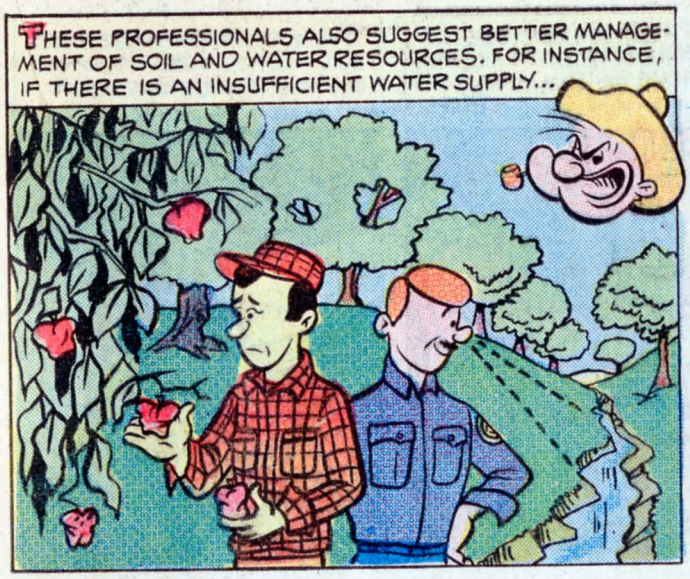
AN AGRONOMIST IS IN A PROFESSIONAL FIELD. HE MUST HAVE A BACHELOR'S DEGREE AND HE SHOULD HAVE A MASTER'S DEGREE TO DO HIS JOB WELL. STILL FURTHER STUDY AND A PH. D. ARE IMPORTANT TO SUCCESS IN THIS FIELD.

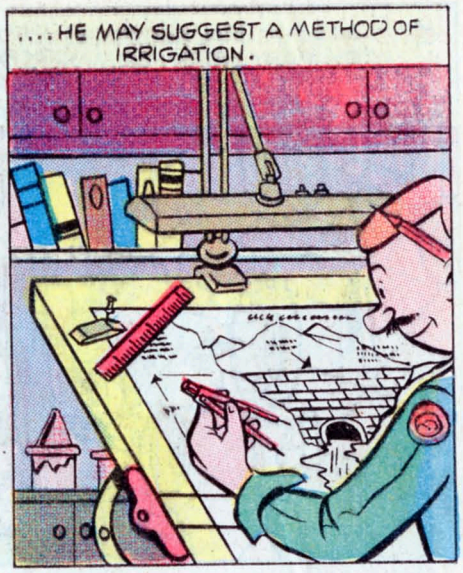


AGRICULTURAL ENGINEERS USE BASIC ENGINEERING PRINCIPLES TO DEVELOP MACHINERY AND EQUIPMENT TO IMPROVE THE METHODS OF PRODUCING FARM CROPS.

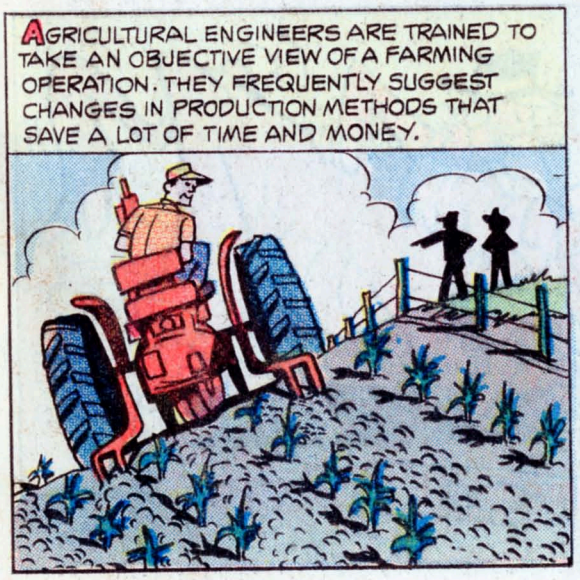


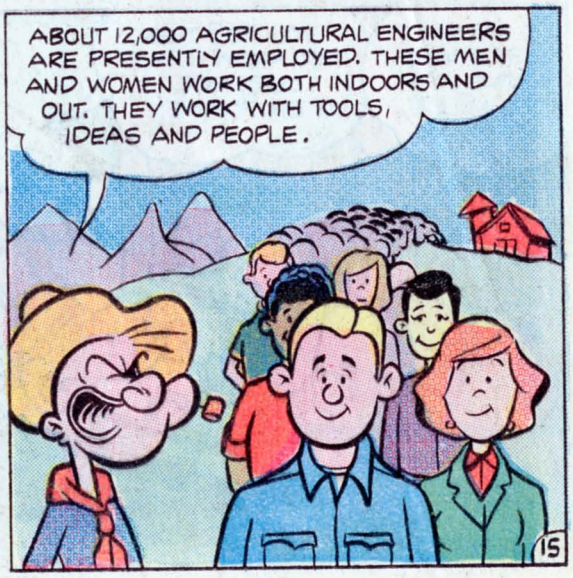
AGRICULTURAL ENGINEERS WORK MOSTLY WITH THE DESIGN OF FARM MACHINERY AND STRUCTURES. THEY SUGGEST MORE EFFICIENT METHODS OF STORING AND PROCESSING FOODS.

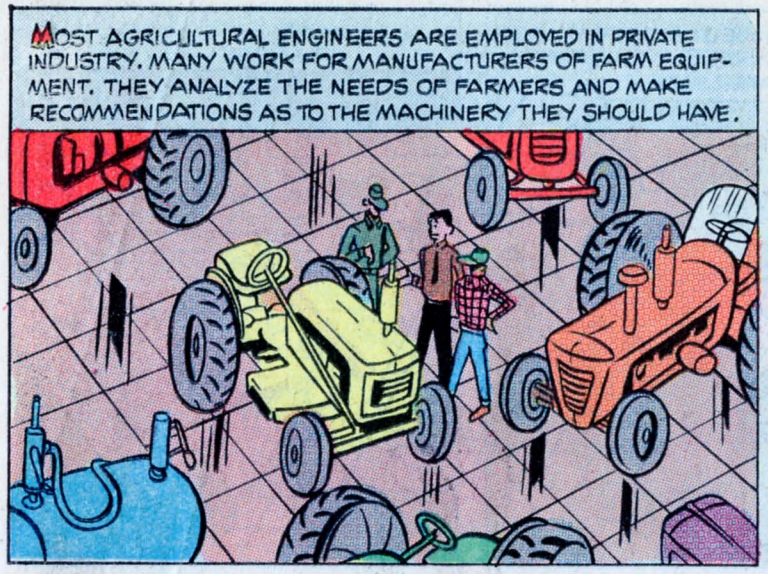

THESE PROFESSIONALS ALSO SUGGEST BETTER MANAGEMENT OF SOIL AND WATER RESOURCES. FOR INSTANCE, IF THERE IS AN INSUFFICIENT WATER SUPPLY...


....HE MAY SUGGEST A METHOD OF IRRIGATION.

PUMP
WITH IRRIGATION, YOU SHOULD DOUBLE YOUR CROP.

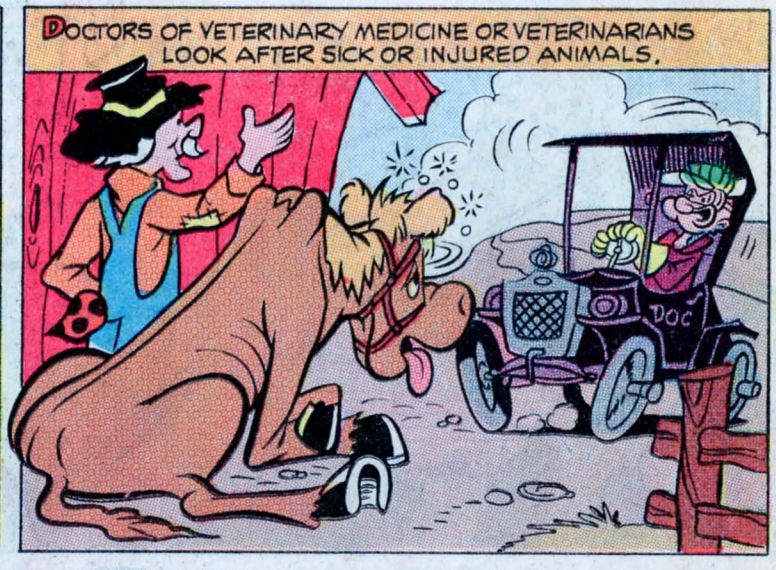

AGRICULTURAL ENGINEERS ARE TRAINED TO TAKE AN OBJECTIVE VIEW OF A FARMING OPERATION. THEY FREQUENTLY SUGGEST CHANGES IN PRODUCTION METHODS THAT SAVE A LOT OF TIME AND MONEY.

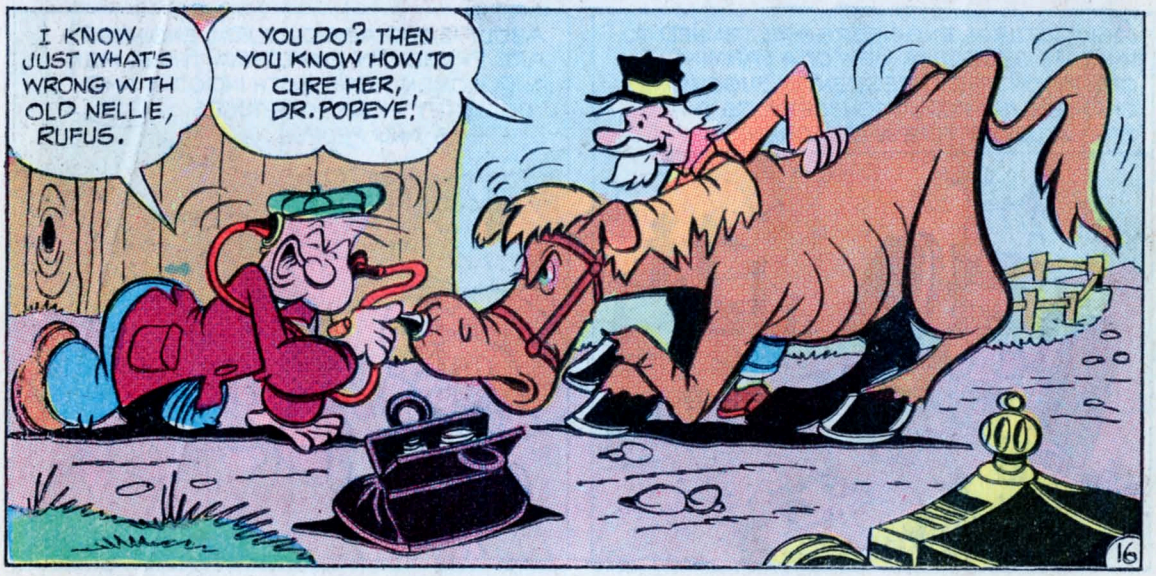

ABOUT 12,000 AGRICULTURAL ENGINEERS ARE PRESENTLY EMPLOYED. THESE MEN AND WOMEN WORK BOTH INDOORS AND OUT. THEY WORK WITH TOOLS, IDEAS AND PEOPLE.

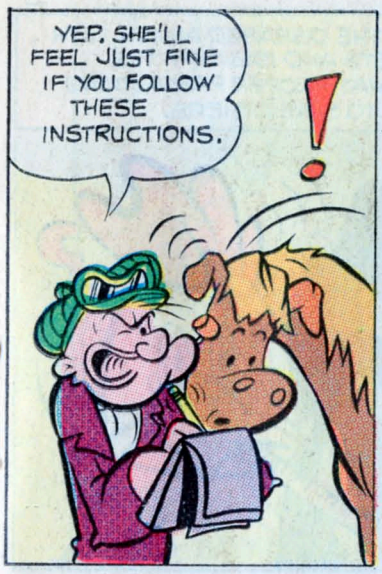

MOST AGRICULTURAL ENGINEERS ARE EMPLOYED IN PRIVATE INDUSTRY. MANY WORK FOR MANUFACTURERS OF FARM EQUIPMENT. THEY ANALYZE THE NEEDS OF FARMERS AND MAKE RECOMMENDATIONS AS TO THE MACHINERY THEY SHOULD HAVE.

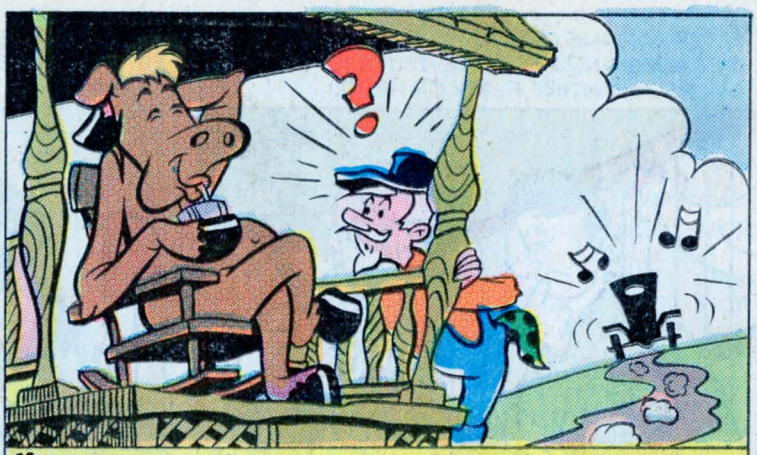
THESE ENGINEERS ALSO SELL SOIL TILLAGE, SEEDING, SPRAYING AND HARVESTING EQUIPMENT TO FARMERS.

AN AGRICULTURAL ENGINEER USUALLY NEEDS A BACHELOR'S DEGREE IN ENGINEERING. A MASTER'S DEGREE IS HELPFUL FOR AGRICULTURAL ENGINEERS WHO WANT TO DO RESEARCH OR TEACH.


DOCTORS OF VETERINARY MEDICINE OR VETERINARIANS LOOK AFTER SICK OR INJURED ANIMALS.
DOC

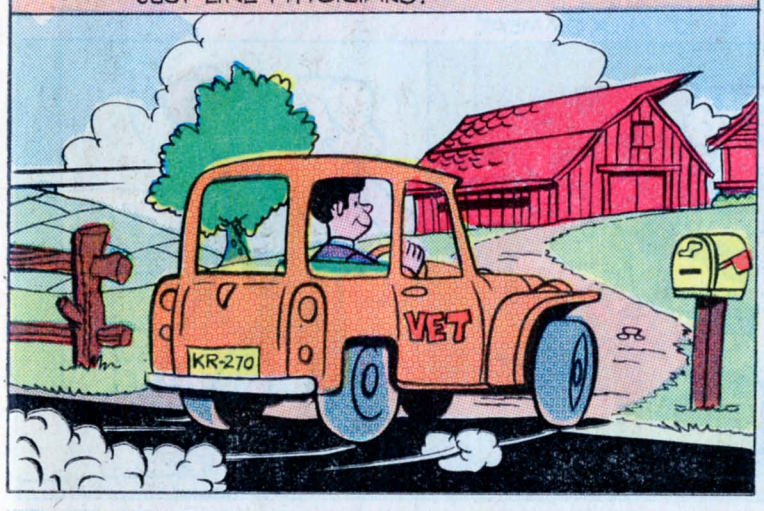

I KNOW JUST WHAT'S WRONG WITH OLD NELLIE, RUFUS.
YOU DO? THEN YOU KNOW HOW TO CURE HER, DR. POPEYE!

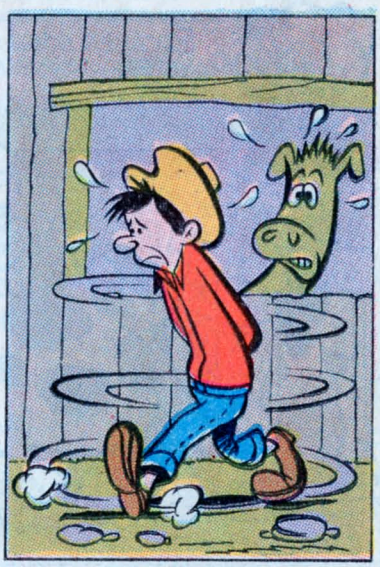


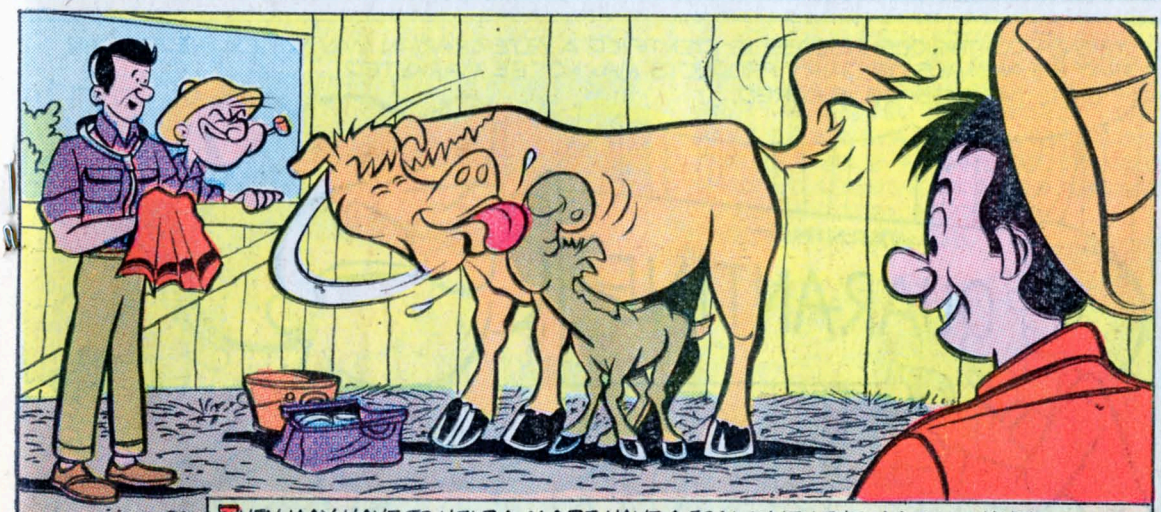


VETERINARIANS DON'T REALLY PRESCRIBE RETIREMENT TO A ROCKING CHAIR FOR OLD OR SICK ANIMALS THE WAY POPEYE DID. THEY FIND OUT WHAT'S WRONG WITH FARM ANIMALS AND CURE THEM IF THEY CAN.

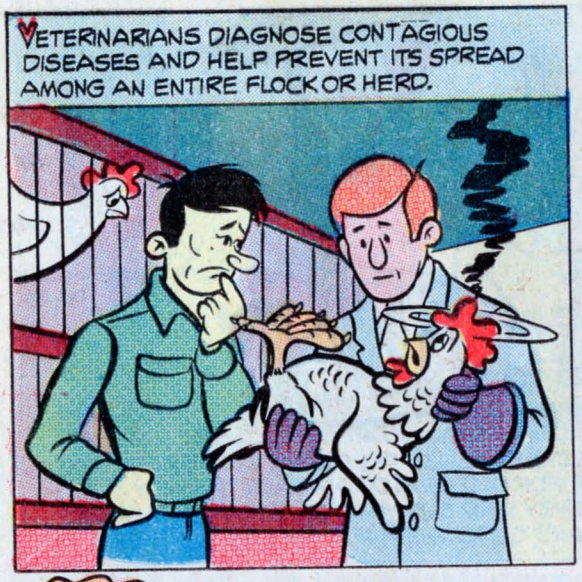
SOMETIMES VETERINARIANS GET CALLED IN AN EMERGENCY JUST LIKE PHYSICIANS.

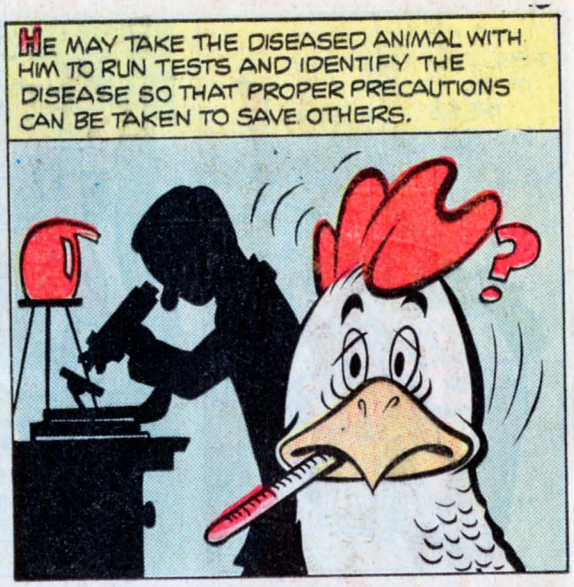


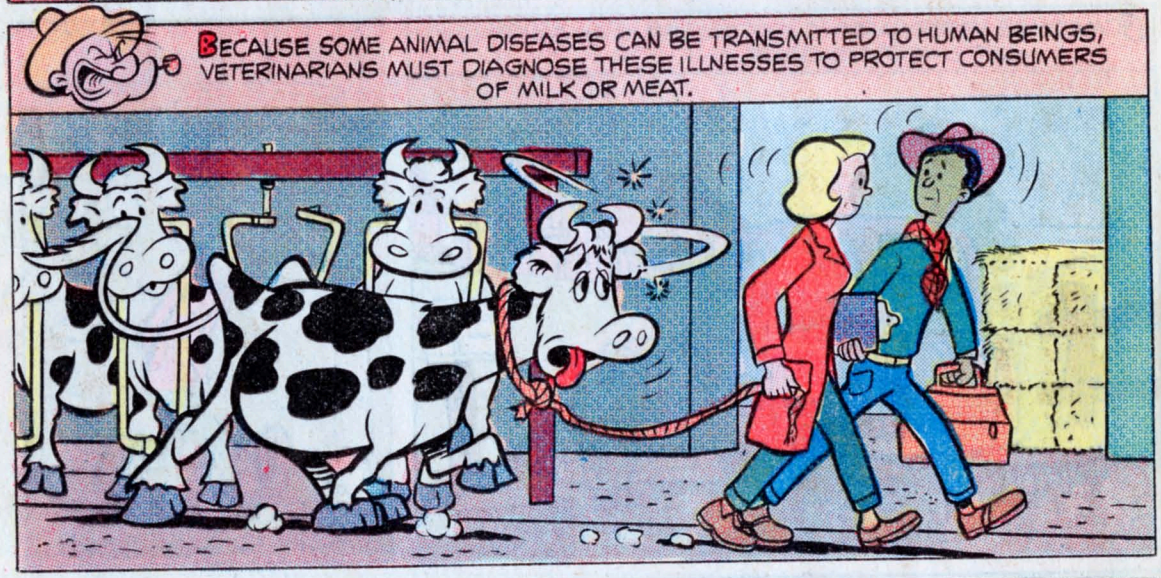


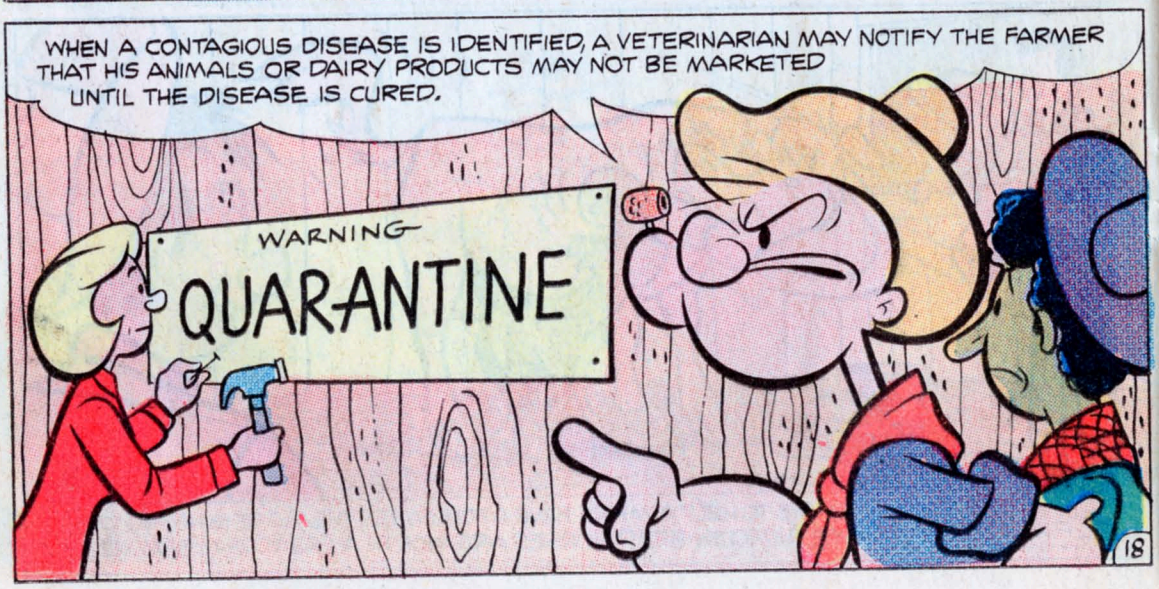


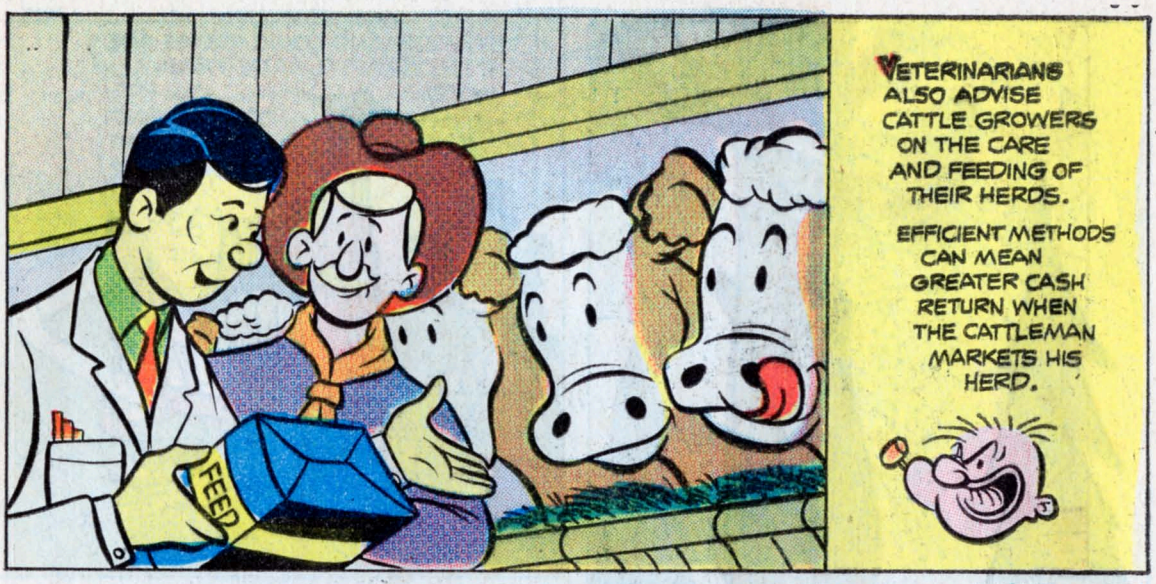
THEY MAY HAVE TO HELP A MARE HAVE A FOAL WHEN THE MARE IS HAVING DIFFICULTY. SOME THOROUGHBRED HORSES ARE WORTH A GREAT DEAL OF MONEY.

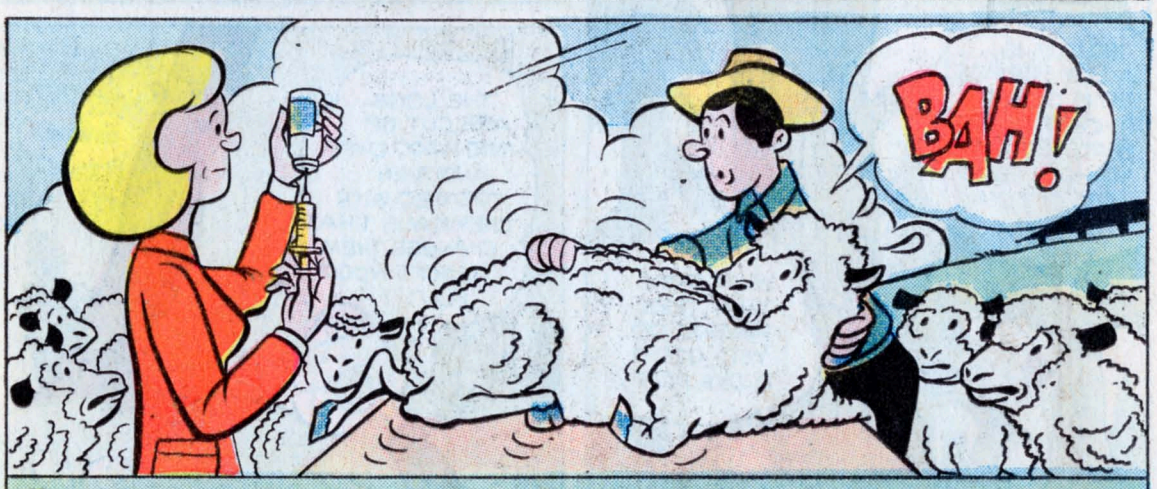

VETERINARIANS DIAGNOSE CONTAGIOUS DISEASES AND HELP PREVENT ITS SPREAD AMONG AN ENTIRE FLOCK OR HERD.


HE MAY TAKE THE DISEASED ANIMAL WITH HIM TO RUN TESTS AND IDENTIFY THE DISEASE SO THAT PROPER PRECAUTIONS CAN BE TAKEN TO SAVE OTHERS.

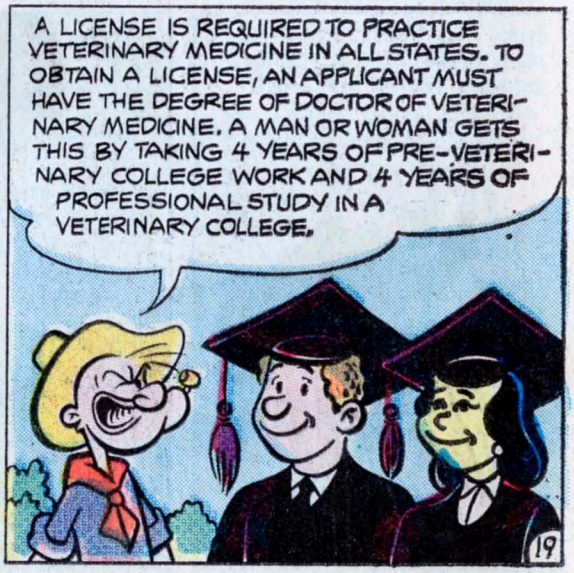

BECAUSE SOME ANIMAL DISEASES CAN BE TRANSMITTED TO HUMAN BEINGS, VETERINARIANS MUST DIAGNOSE THESE ILLNESSES TO PROTECT CONSUMERS OF MILK OR MEAT.


WHEN A CONTAGIOUS DISEASE IS IDENTIFIED, A VETERINARIAN MAY NOTIFY THE FARMER THAT HIS ANIMALS OR DAIRY PRODUCTS MAY NOT BE MARKETED UNTIL THE DISEASE IS CURED.
WARNING
QUARANTINE

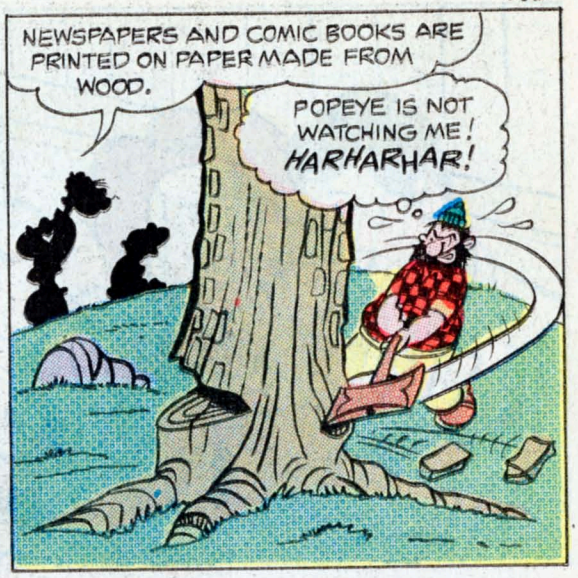


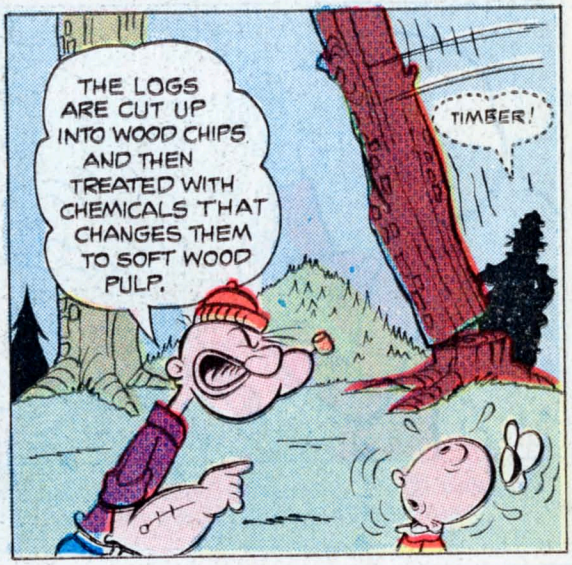


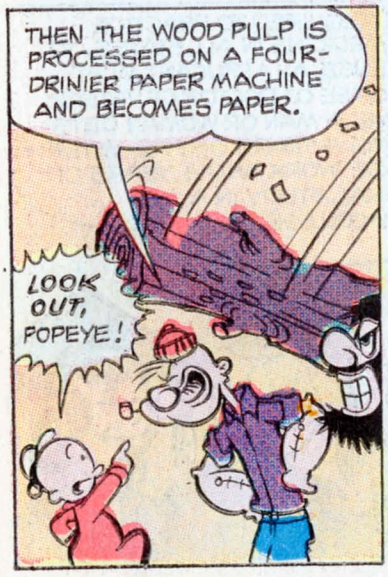
VETERINARIANS INOCULATE LIVESTOCK AGAINST MANY DISEASES. THEY HELP PROTECT THE FARMER AGAINST FINANCIAL LOSS FROM ANIMAL DISEASES.

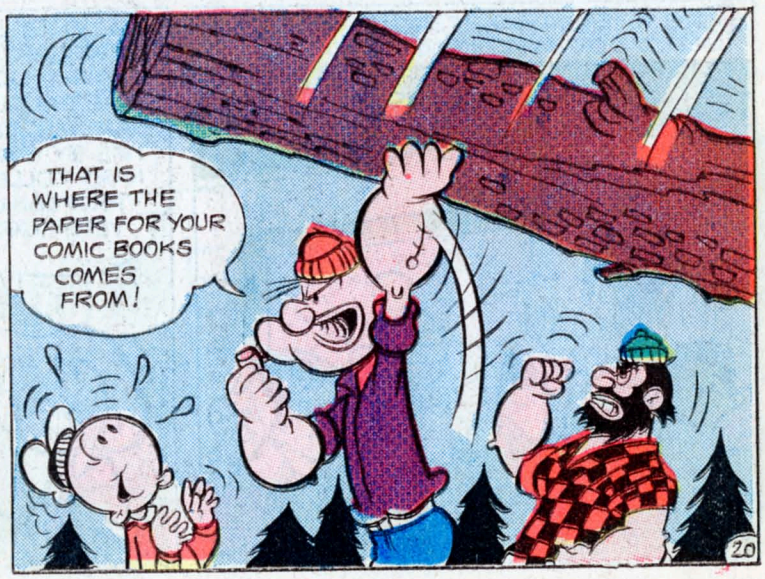


BRUTUS IS A LUMBERMAN! HE IS GOING TO CHOP DOWN THAT TREE SO YOU CAN READ LOTS OF COMIC BOOKS!
WHAT DOES THAT TREE HAVE TO DO WITH COMIC BOOKS, POPEYE?


NEWSPAPERS AND COMIC BOOKS ARE PRINTED ON PAPER MADE FROM WOOD.
POPEYE IS NOT WATCHING ME! HARHARHAR!


THE LOGS ARE CUT UP INTO WOOD CHIPS AND THEN TREATED WITH CHEMICALS THAT CHANGES THEM TO SOFT WOOD PULP.
TIMBER!


THEN THE WOOD PULP IS PROCESSED ON A FOUR-DRINIER PAPER MACHINE AND BECOMES PAPER.
LOOK OUT, POPEYE!


THAT IS WHERE THE PAPER FOR YOUR COMIC BOOKS COMES FROM!

YOU MEAN ALL THESE TREES ARE CUT DOWN JUST FOR COMIC BOOKS, POPEYE?

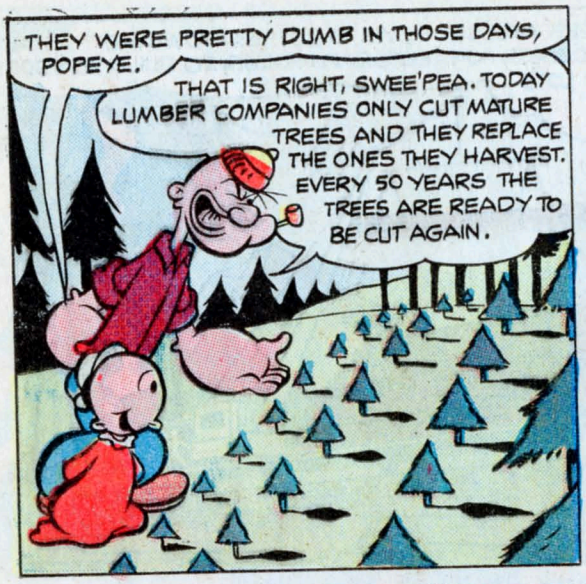
OH, NO, SWEE'PEA. TREES ARE CUT DOWN TO BE USED TO MAKE FURNITURE, BUILD HOUSES, FOR TELEGRAPH POLES, TO BUILD BOATS, MAKE PLYWOOD AND LOTS OF OTHER THINGS!

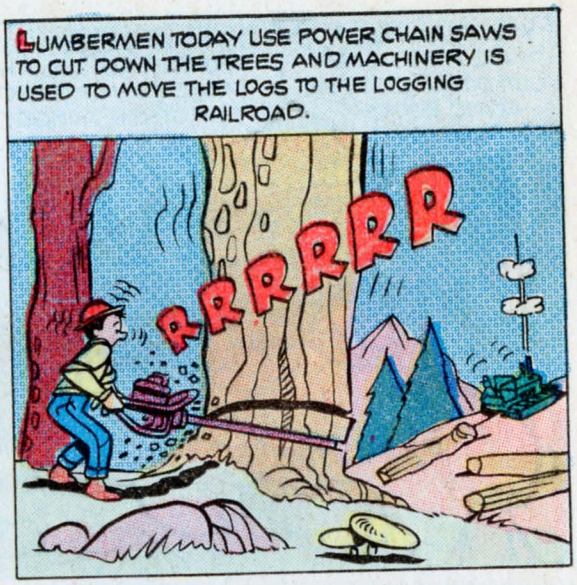
LUMBERING IS ONE OF THE MOST IMPORTANT INDUSTRIES IN THE WORLD!

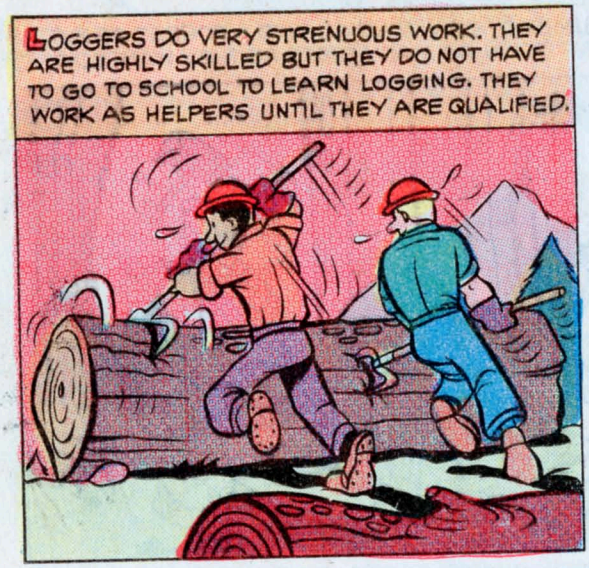
LUMBERING HAS CHANGED A LOT IN THE LAST 100 YEARS.

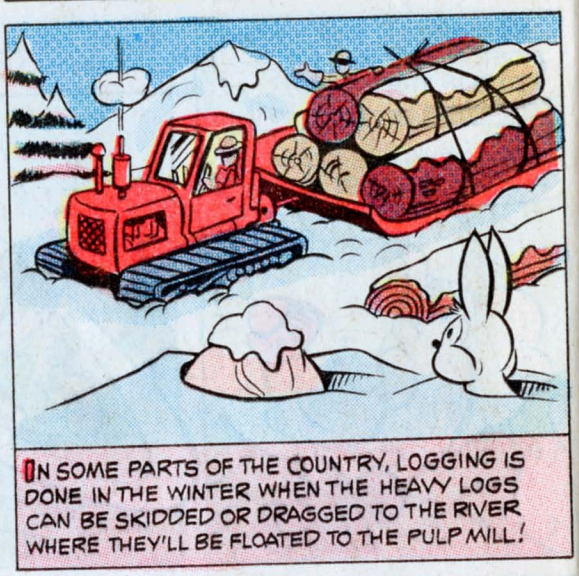
LONG AGO, LUMBERMEN WOULD GO INTO A FOREST OF BIG TREES AND CUT DOWN AS MANY TREES AS THEY WANTED.

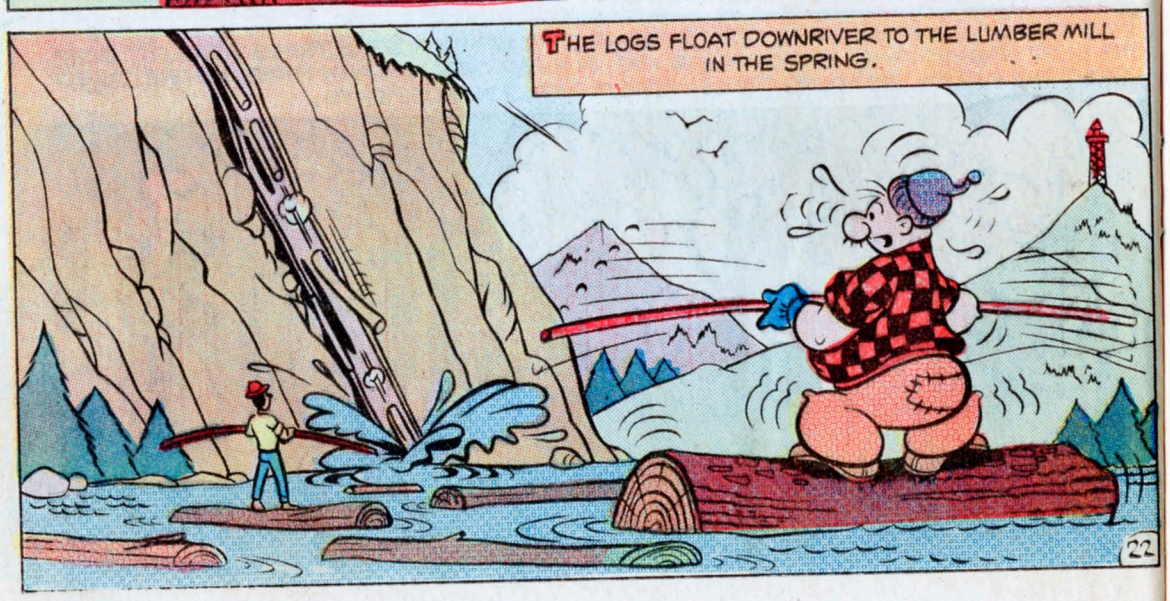
THIS KIND OF LUMBERING WAS VERY DESTRUCTIVE. AFTER ALL THE TREES WERE CUT DOWN, THE LAND WASHED AWAY IN FLOODS OR WAS BURNED OVER IN FLASH FIRES. NO ONE CARED ABOUT THE FUTURE. NO YOUNG TREES WERE PLANTED IN THOSE DAYS.

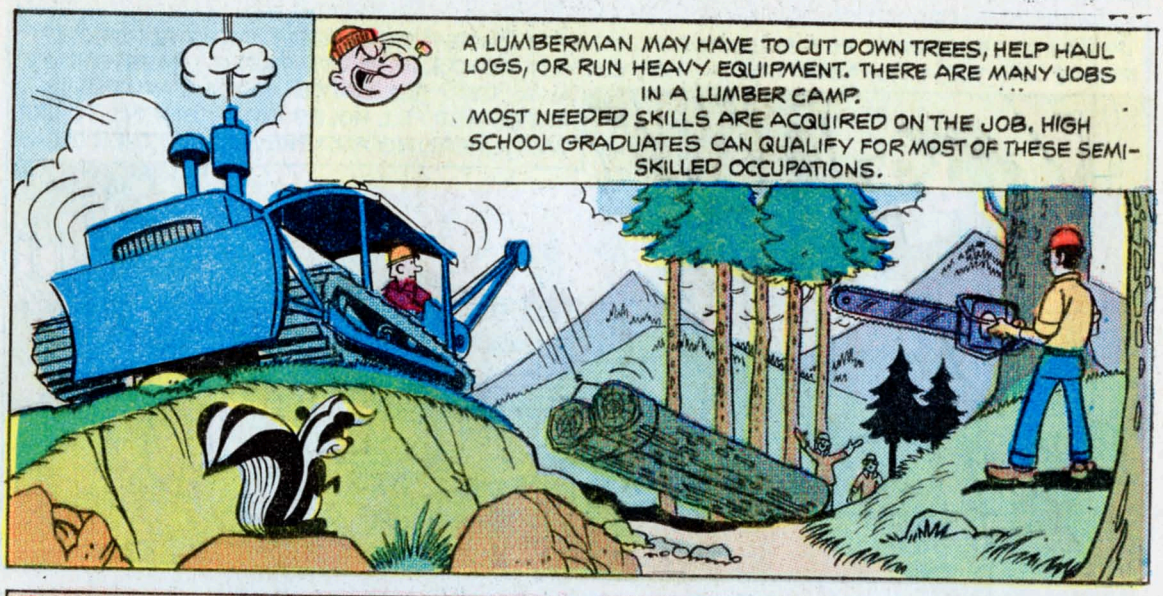

THEY WERE PRETTY DUMB IN THOSE DAYS, POPEYE.
THAT IS RIGHT, SWEE'PEA. TODAY LUMBER COMPANIES ONLY CUT MATURE TREES AND THEY REPLACE THE ONES THEY HARVEST. EVERY 50 YEARS THE TREES ARE READY TO BE CUT AGAIN.

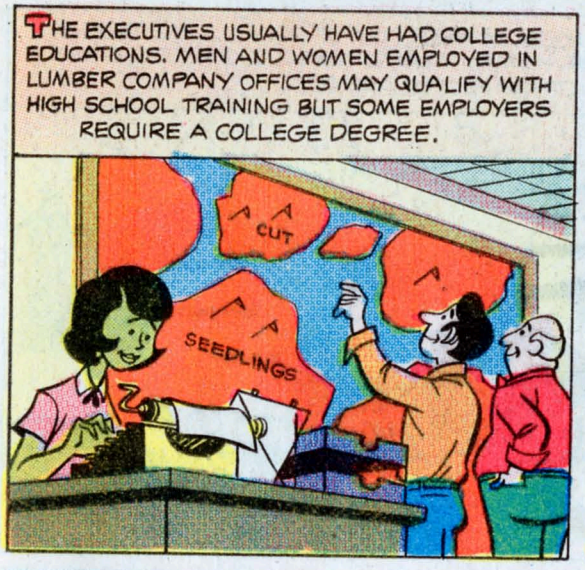

LUMBERMEN TODAY USE POWER CHAIN SAWS TO CUT DOWN THE TREES AND MACHINERY IS USED TO MOVE THE LOGS TO THE LOGGING RAILROAD.
RRRRRR

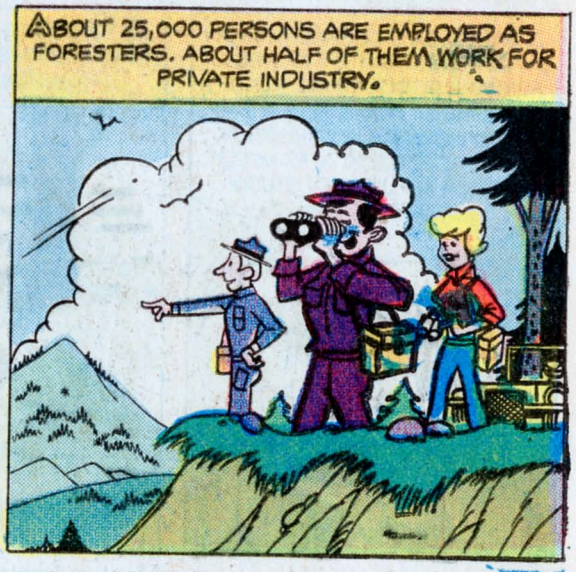

LOGGERS DO VERY STRENUOUS WORK. THEY ARE HIGHLY SKILLED BUT THEY DO NOT HAVE TO GO TO SCHOOL TO LEARN LOGGING. THEY WORK AS HELPERS UNTIL THEY ARE QUALIFIED.

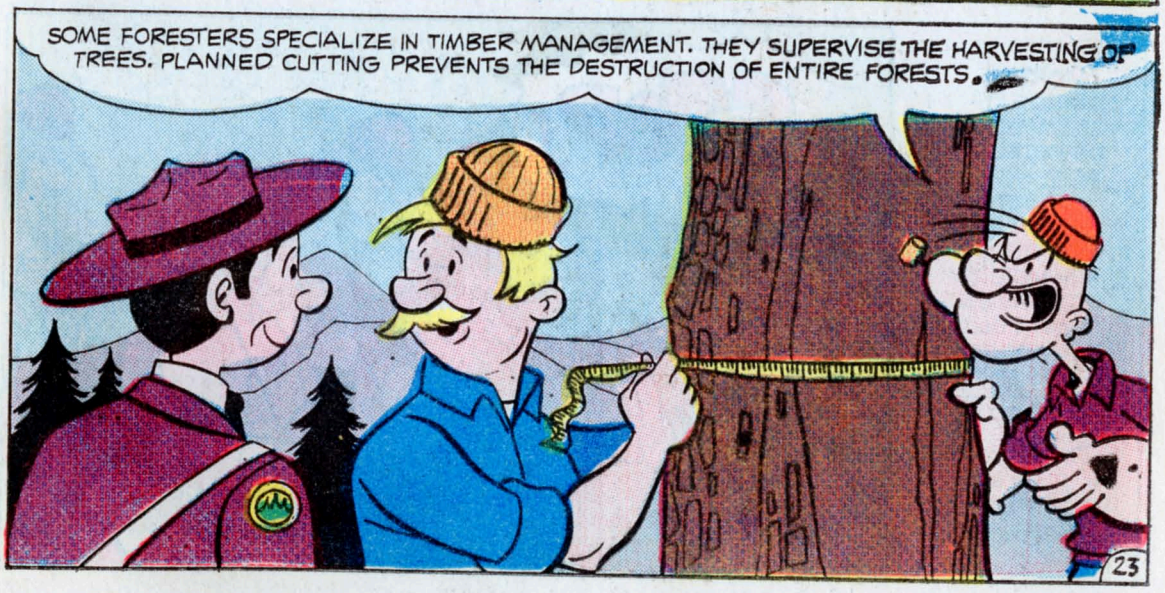

IN SOME PARTS OF THE COUNTRY, LOGGING IS DONE IN THE WINTER WHEN THE HEAVY LOGS CAN BE SKIDDED OR DRAGGED TO THE RIVER WHERE THEY'LL BE FLOATED TO THE PULP MILL!

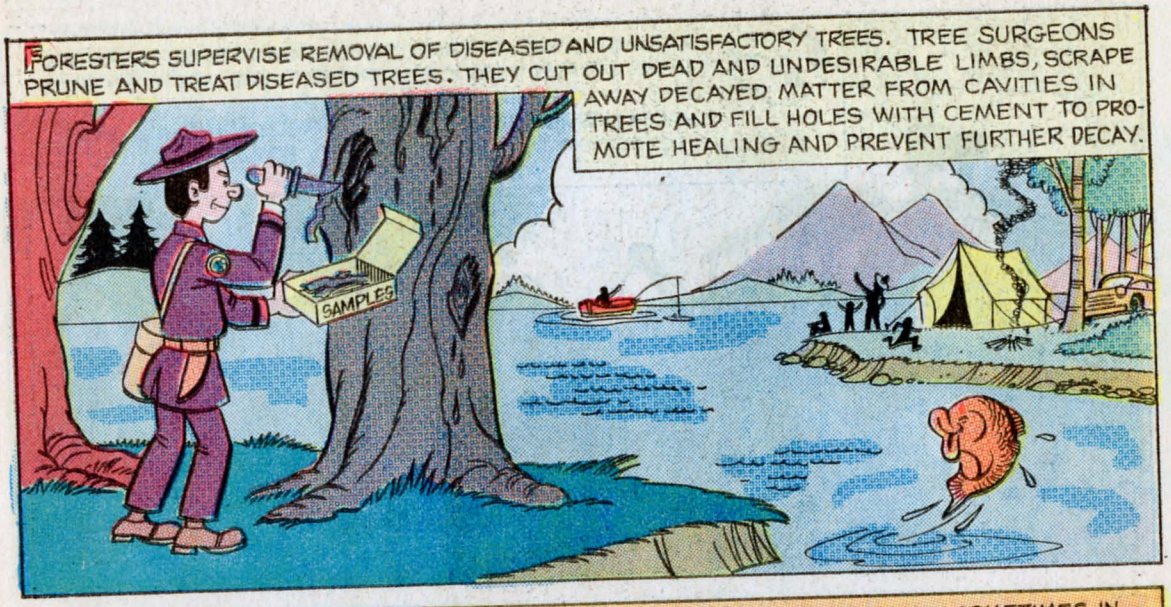

THE LOGS FLOAT DOWNRIVER TO THE LUMBER MILL IN THE SPRING.

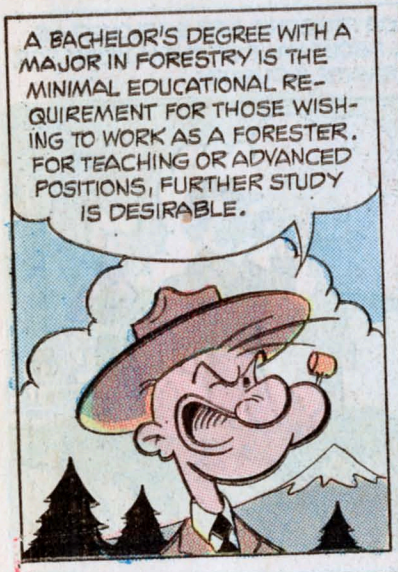

A LUMBERMAN MAY HAVE TO CUT DOWN TREES, HELP HAUL LOGS, OR RUN HEAVY EQUIPMENT. THERE ARE MANY JOBS IN A LUMBER CAMP.
MOST NEEDED SKILLS ARE ACQUIRED ON THE JOB. HIGH SCHOOL GRADUATES CAN QUALIFY FOR MOST OF THESE SEMI-SKILLED OCCUPATIONS.


THE EXECUTIVES USUALLY HAVE HAD COLLEGE EDUCATIONS. MEN AND WOMEN EMPLOYED IN LUMBER COMPANY OFFICES MAY QUALIFY WITH HIGH SCHOOL TRAINING BUT SOME EMPLOYERS REQUIRE A COLLEGE DEGREE.
CUT
SEEDLINGS


ABOUT 25,000 PERSONS ARE EMPLOYED AS FORESTERS. ABOUT HALF OF THEM WORK FOR PRIVATE INDUSTRY.

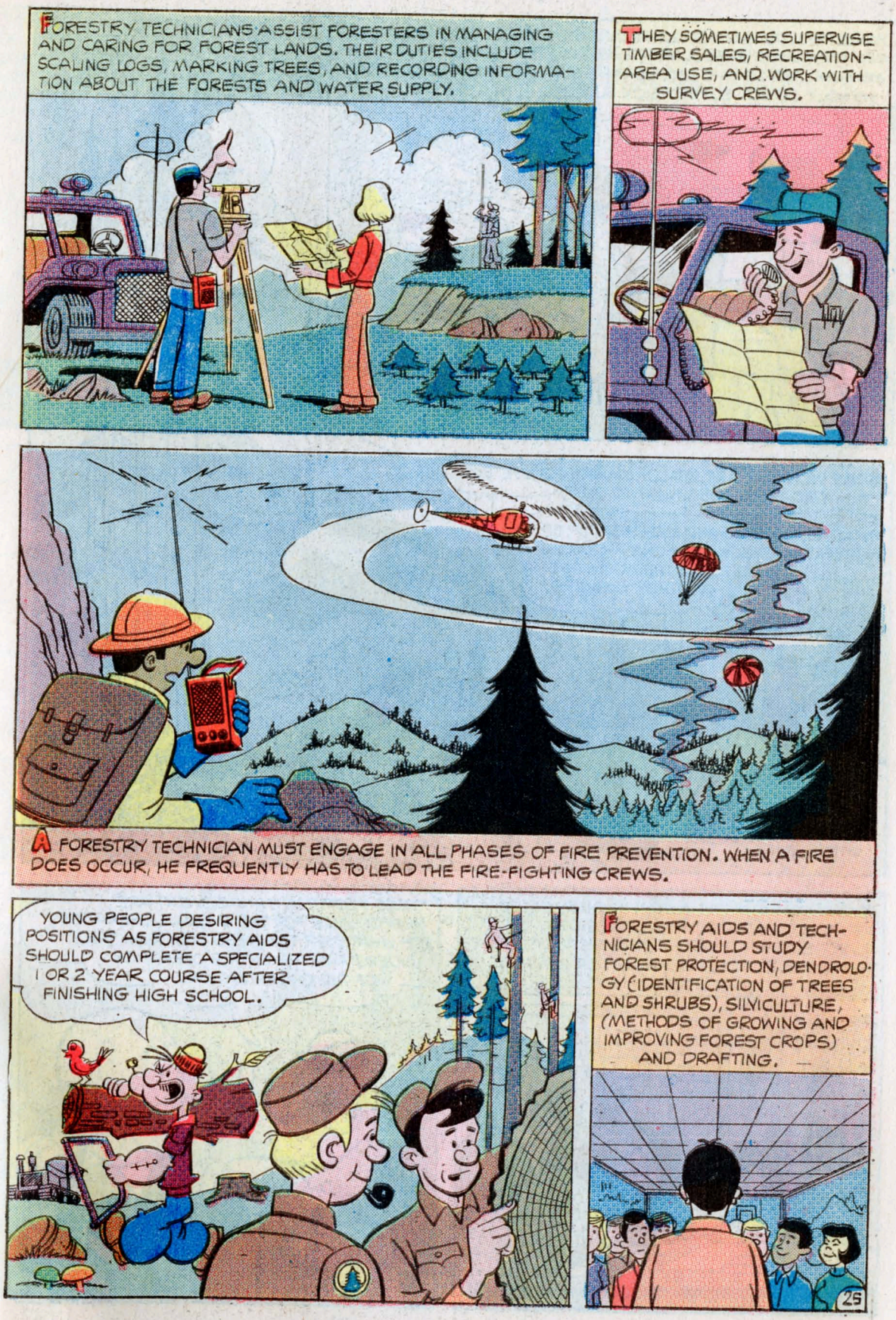

SOME FORESTERS SPECIALIZE IN TIMBER MANAGEMENT. THEY SUPERVISE THE HARVESTING OF TREES. PLANNED CUTTING PREVENTS THE DESTRUCTION OF ENTIRE FORESTS.


FORESTERS SUPERVISE REMOVAL OF DISEASED AND UNSATISFACTORY TREES. TREE SURGEONS PRUNE AND TREAT DISEASED TREES. THEY CUT OUT DEAD AND UNDESIRABLE LIMBS, SCRAPE AWAY DECAYED MATTER FROM CAVITIES IN TREES AND FILL HOLES WITH CEMENT TO PROMOTE HEALING AND PREVENT FURTHER DECAY.
SAMPLES

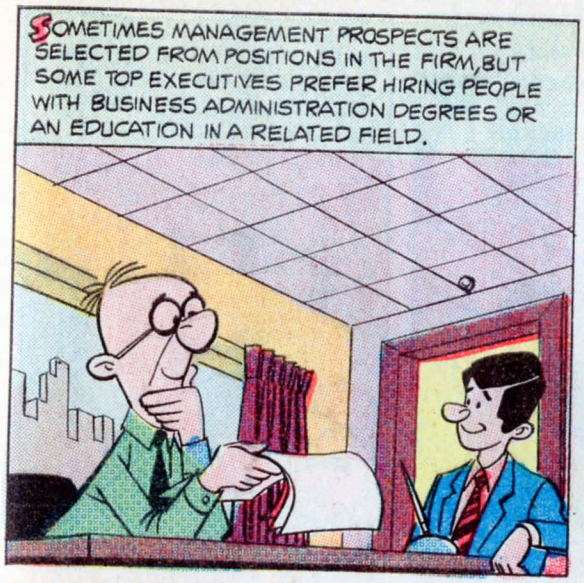

A BACHELOR'S DEGREE WITH A MAJOR IN FORESTRY IS THE MINIMAL EDUCATIONAL REQUIREMENT FOR THOSE WISHING TO WORK AS A FORESTER. FOR TEACHING OR ADVANCED POSITIONS, FURTHER STUDY IS DESIRABLE.

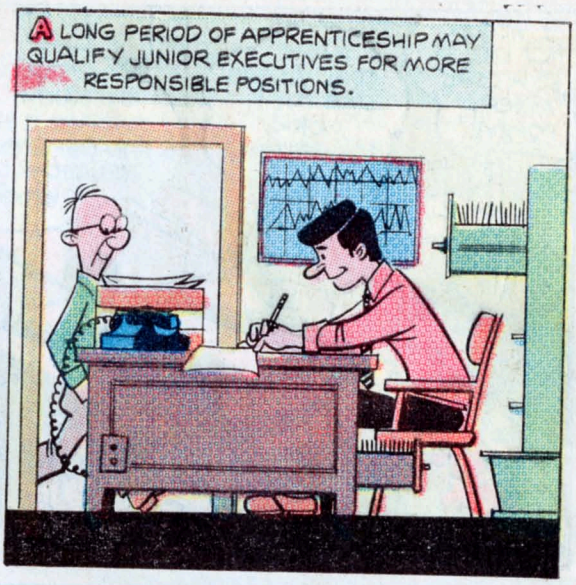
A FORESTER USUALLY WORKS OUT OF DOORS, SOMETIMES IN BAD WEATHER. HE MAY HAVE TO WORK LONG HOURS, OFTEN WHEN OTHER PEOPLE ARE OFF.

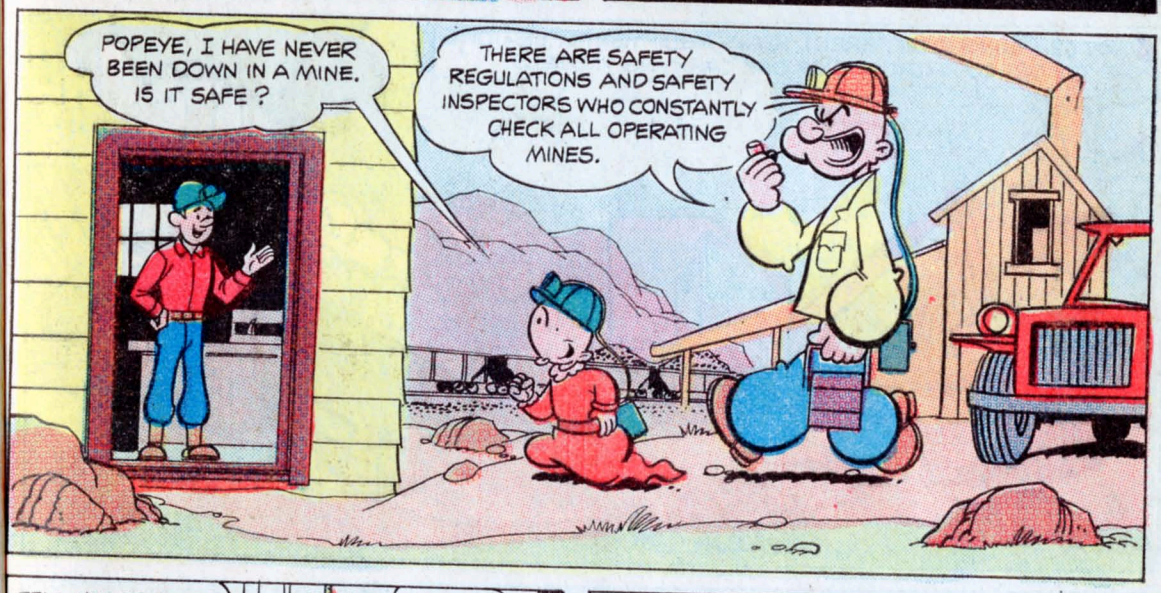
MORE FORESTERS ARE EMPLOYED TO PROTECT EXISTING FORESTS. HIGHER PROFITS CAN BE MADE BY COMPANIES THAT FOLLOW APPROVED LOGGING PRACTICES.
STOP!


FORESTRY TECHNICIANS ASSIST FORESTERS IN MANAGING AND CARING FOR FOREST LANDS. THEIR DUTIES INCLUDE SCALING LOGS, MARKING TREES, AND RECORDING INFORMATION ABOUT THE FORESTS AND WATER SUPPLY.
THEY SOMETIMES SUPERVISE TIMBER SALES, RECREATION-AREA USE, AND WORK WITH SURVEY CREWS.
A FORESTRY TECHNICIAN MUST ENGAGE IN ALL PHASES OF FIRE PREVENTION. WHEN A FIRE DOES OCCUR, HE FREQUENTLY HAS TO LEAD THE FIRE-FIGHTING CREWS.
YOUNG PEOPLE DESIRING POSITIONS AS FORESTRY AIDS SHOULD COMPLETE A SPECIALIZED 1 OR 2 YEAR COURSE AFTER FINISHING HIGH SCHOOL.
FORESTRY AIDS AND TECHNICIANS SHOULD STUDY FOREST PROTECTION, DENDROLOGY (IDENTIFICATION OF TREES AND SHRUBS), SILVICULTURE, (METHODS OF GROWING AND IMPROVING FOREST CROPS) AND DRAFTING.

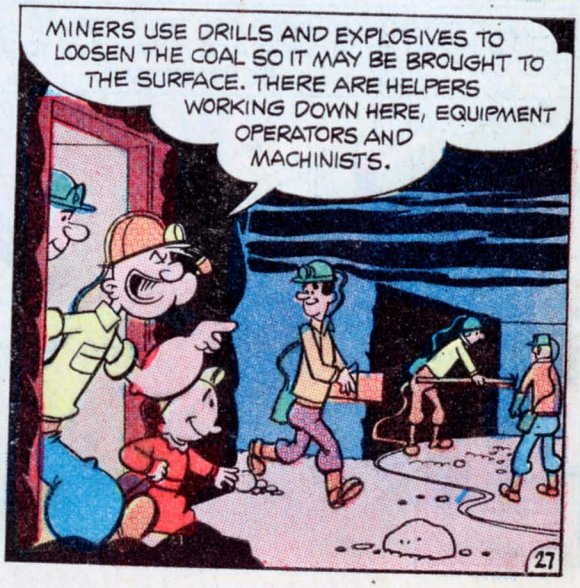
FORESTRY AIDS AND THE TECHNICIANS SOMETIMES WORK HARD. THEY MAY WORK LONG, IRREGULAR HOURS, SOMETIMES IN VERY BAD WEATHER. PEOPLE WHO LIKE WORKING OUT OF DOORS WHO CAN WORK WITHOUT DIRECT SUPERVISION SUCCEED IN THIS FIELD.
SOME WORKERS ARE REALLY SMART, POPEYE, BUT WHO TELLS THEM WHAT TO DO?
IN ALL INDUSTRIES AND EVERY GROUP OF WORKERS, THERE IS SOMEONE IN CHARGE WHO PLANS THE ACTIVITIES OF OTHER WORKERS.
EVERY COMPANY HAS A MAN IN CHARGE... HE MAY BE CALLED A COMPANY PRESIDENT OR A PLANT SUPERINTENDENT OR A DISTRICT SUPERVISER BUT TO THOSE WORKING FOR HIM HE IS THE BOSS!
THESE PEOPLE IN MANAGEMENT ARE RESPONSIBLE FOR THE OVERALL OPERATION OF WHATEVER BUSINESS THEY RUN. THEY UNDERSTAND THE ENTIRE OPERATION OF THE ORGANIZATION.

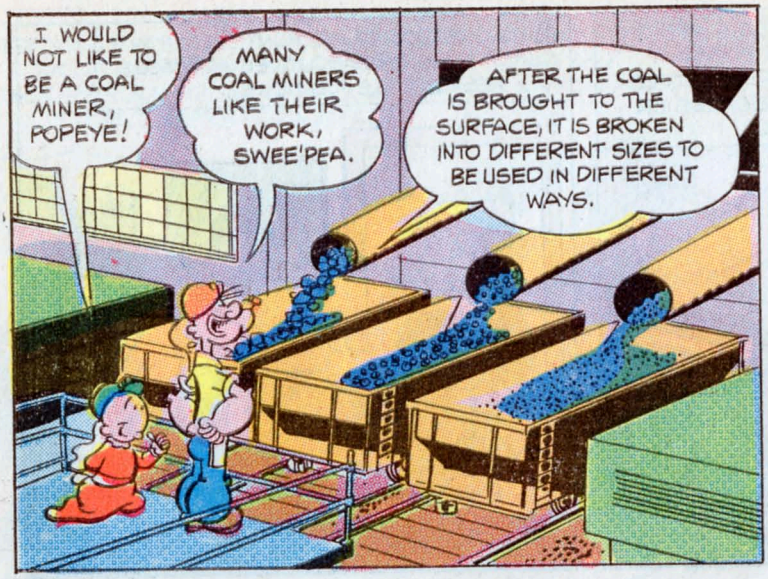

SOMETIMES MANAGEMENT PROSPECTS ARE SELECTED FROM POSITIONS IN THE FIRM, BUT SOME TOP EXECUTIVES PREFER HIRING PEOPLE WITH BUSINESS ADMINISTRATION DEGREES OR AN EDUCATION IN A RELATED FIELD.

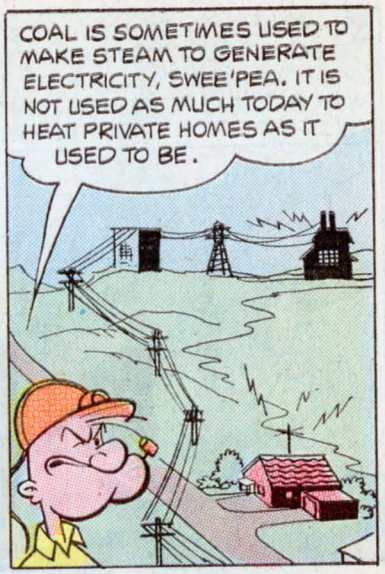

A LONG PERIOD OF APPRENTICESHIP MAY QUALIFY JUNIOR EXECUTIVES FOR MORE RESPONSIBLE POSITIONS.

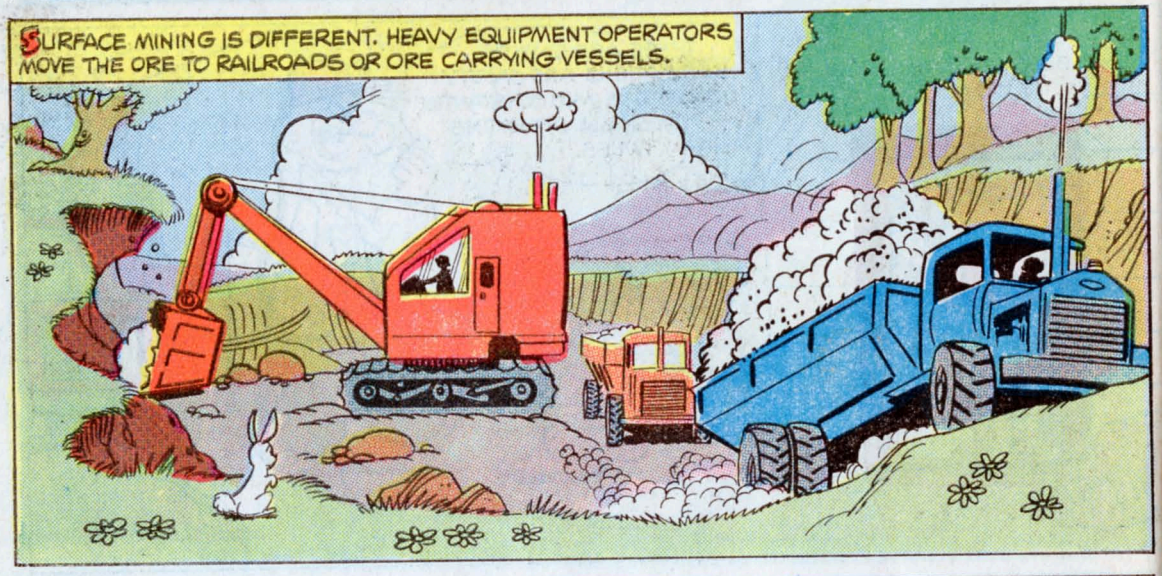

POPEYE, I HAVE NEVER BEEN DOWN IN A MINE. IS IT SAFE ?
THERE ARE SAFETY REGULATIONS AND SAFETY INSPECTORS WHO CONSTANTLY CHECK ALL OPERATING MINES.

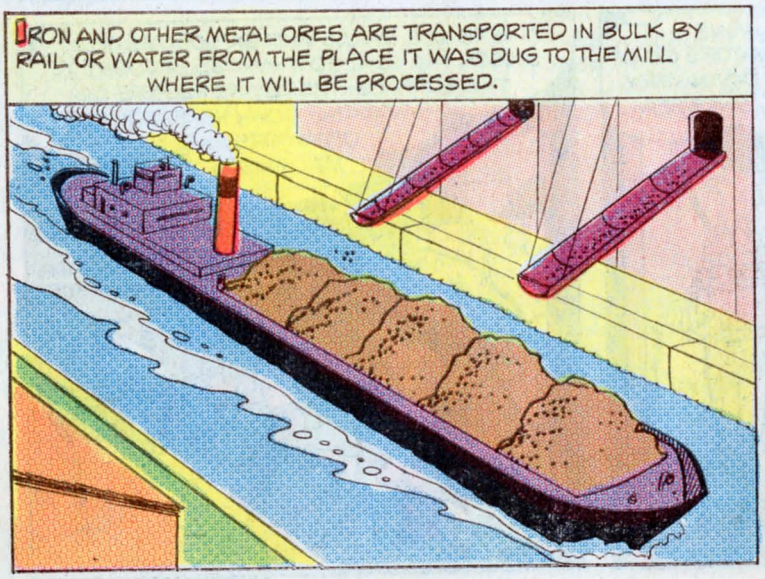
TELL HIM TO STOP. MY STOMACH IS STILL UP THERE !
MINE ELEVATORS GO UP AND DOWN VERY FAST, SWEE'PEA.


MINERS USE DRILLS AND EXPLOSIVES TO LOOSEN THE COAL SO IT MAY BE BROUGHT TO THE SURFACE. THERE ARE HELPERS WORKING DOWN HERE, EQUIPMENT OPERATORS AND MACHINISTS.

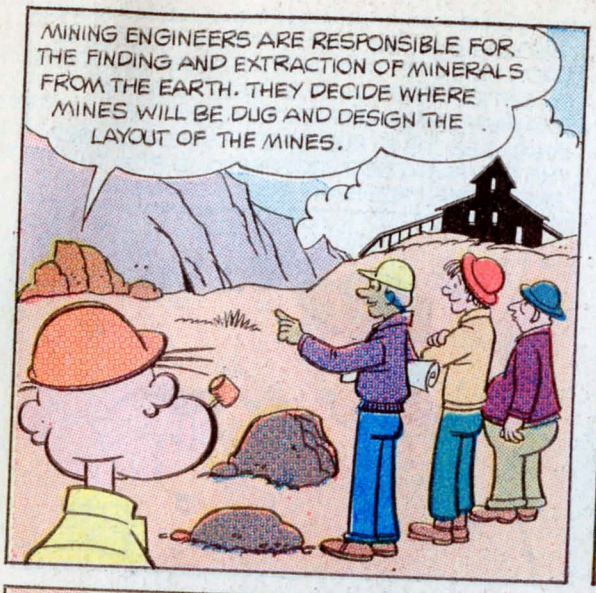

I WOULD NOT LIKE TO BE A COAL MINER, POPEYE!
MANY COAL MINERS LIKE THEIR WORK, SWEE'PEA.
AFTER THE COAL IS BROUGHT TO THE SURFACE, IT IS BROKEN INTO DIFFERENT SIZES TO BE USED IN DIFFERENT WAYS.

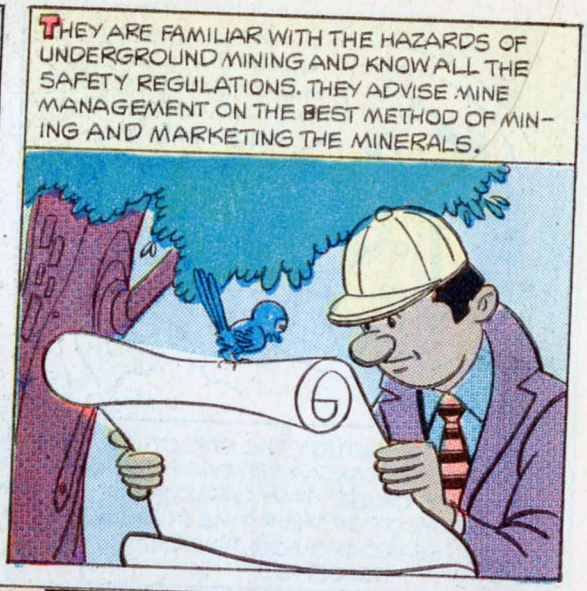

COAL IS SOMETIMES USED TO MAKE STEAM TO GENERATE ELECTRICITY, SWEE'PEA. IT IS NOT USED AS MUCH TODAY TO HEAT PRIVATE HOMES AS IT USED TO BE.

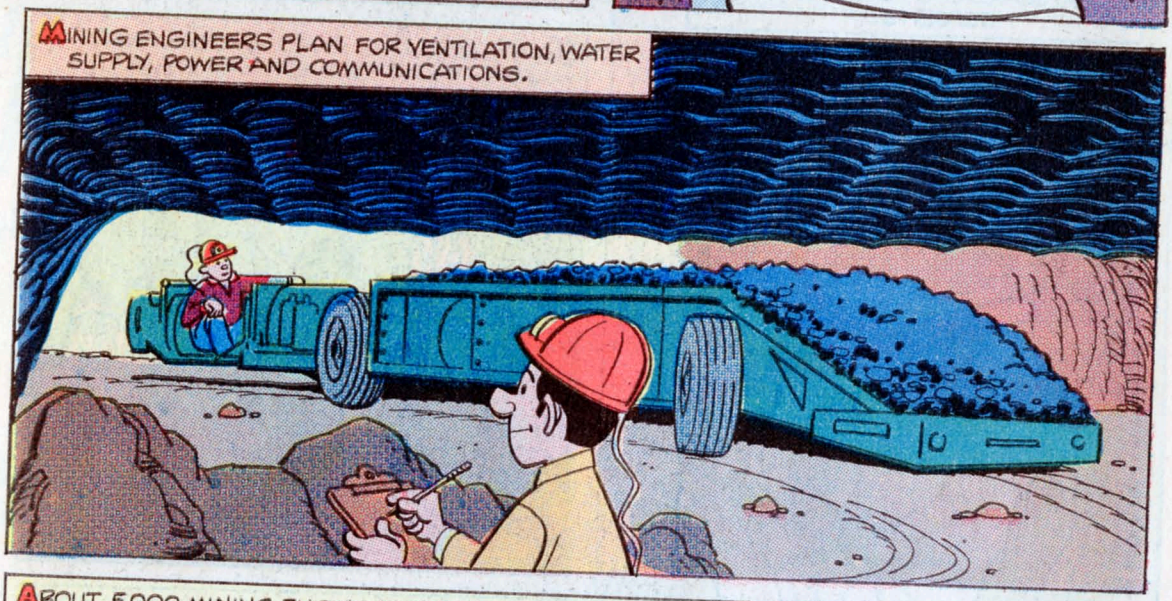

SURFACE MINING IS DIFFERENT. HEAVY EQUIPMENT OPERATORS MOVE THE ORE TO RAILROADS OR ORE CARRYING VESSELS.

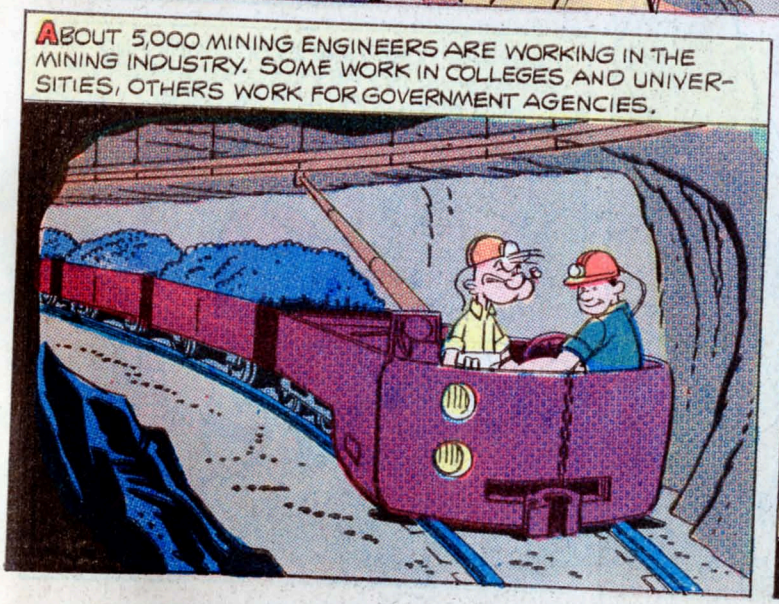

IRON AND OTHER METAL ORES ARE TRANSPORTED IN BULK BY RAIL OR WATER FROM THE PLACE IT WAS DUG TO THE MILL WHERE IT WILL BE PROCESSED.

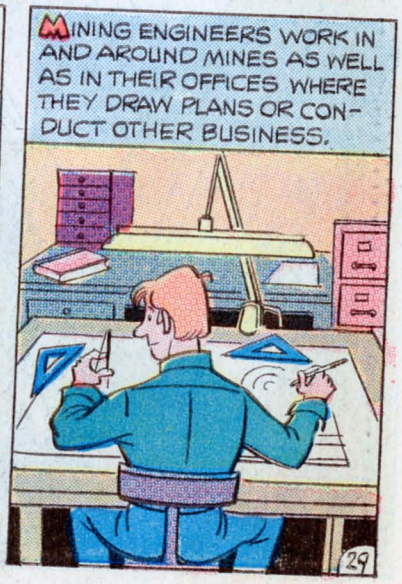
AT THE MILL THE ORE IS PROCESSED, THE METAL SMELTED, AND THE METAL IS READY TO BE MANUFACTURED INTO A FINISHED PRODUCT.

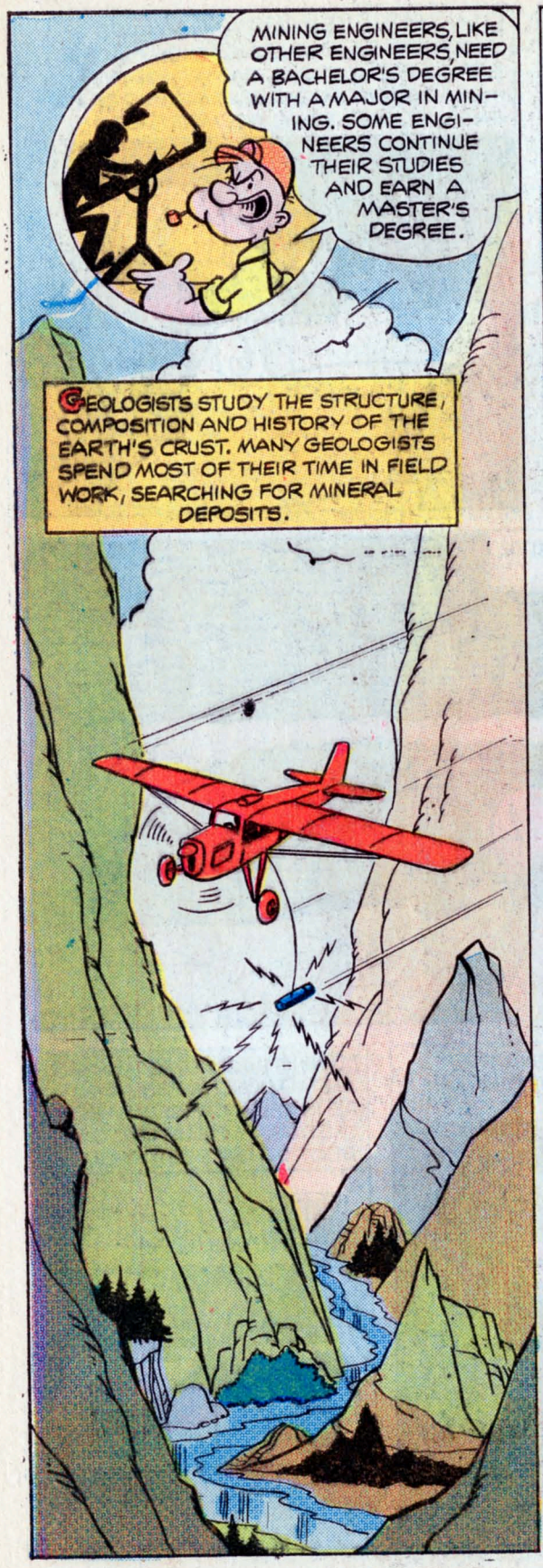

MINING ENGINEERS ARE RESPONSIBLE FOR THE FINDING AND EXTRACTION OF MINERALS FROM THE EARTH. THEY DECIDE WHERE MINES WILL BE DUG AND DESIGN THE LAYOUT OF THE MINES.

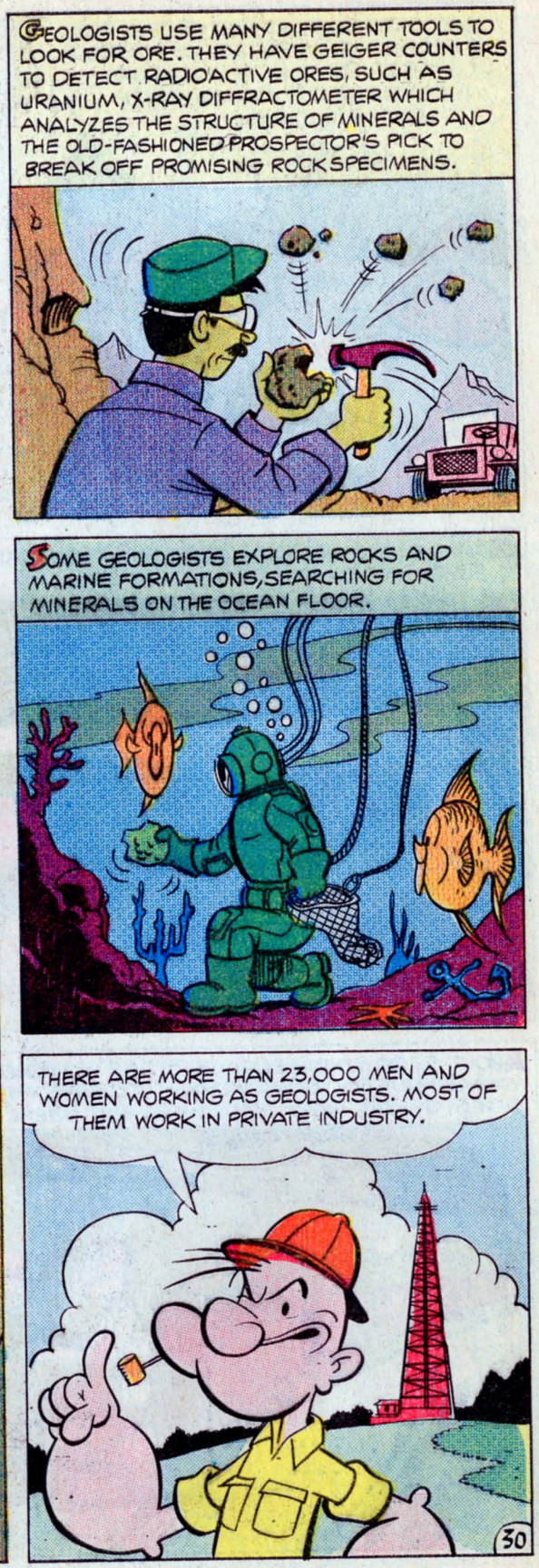

THEY ARE FAMILIAR WITH THE HAZARDS OF UNDERGROUND MINING AND KNOW ALL THE SAFETY REGULATIONS. THEY ADVISE MINE MANAGEMENT ON THE BEST METHOD OF MINING AND MARKETING THE MINERALS.

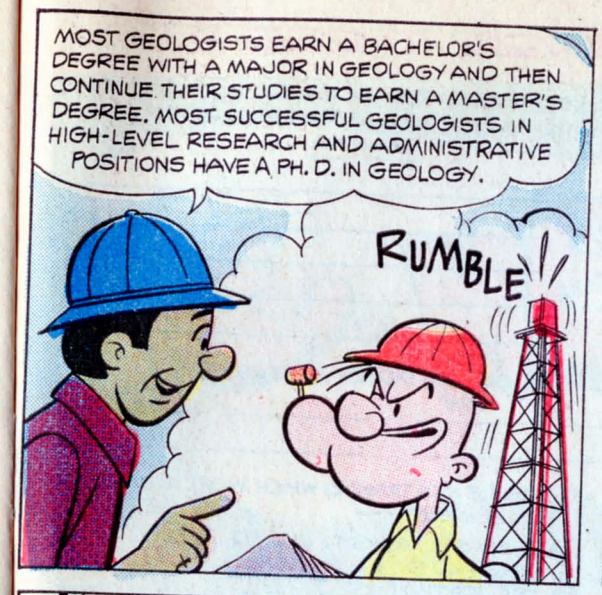

MINING ENGINEERS PLAN FOR VENTILATION, WATER SUPPLY, POWER AND COMMUNICATIONS.

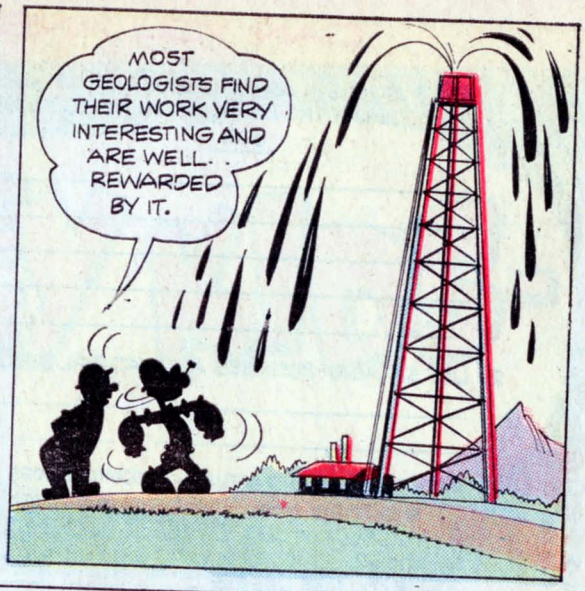

ABOUT 5,000 MINING ENGINEERS ARE WORKING IN THE MINING INDUSTRY. SOME WORK IN COLLEGES AND UNIVERSITIES, OTHERS WORK FOR GOVERNMENT AGENCIES.


MINING ENGINEERS WORK IN AND AROUND MINES AS WELL AS IN THEIR OFFICES WHERE THEY DRAW PLANS OR CONDUCT OTHER BUSINESS.

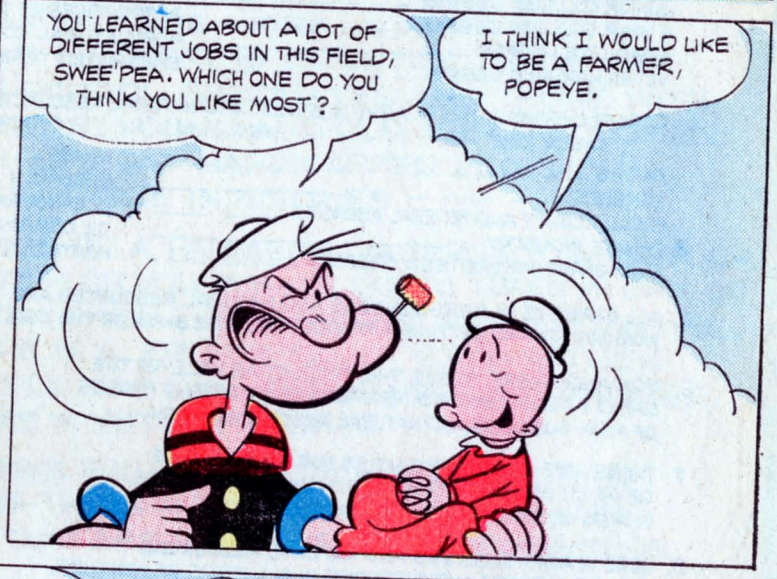

MINING ENGINEERS, LIKE OTHER ENGINEERS, NEED A BACHELOR'S DEGREE WITH A MAJOR IN MINING. SOME ENGINEERS CONTINUE THEIR STUDIES AND EARN A MASTER'S DEGREE.
GEOLOGISTS STUDY THE STRUCTURE, COMPOSITION AND HISTORY OF THE EARTH'S CRUST. MANY GEOLOGISTS SPEND MOST OF THEIR TIME IN FIELD WORK, SEARCHING FOR MINERAL DEPOSITS.

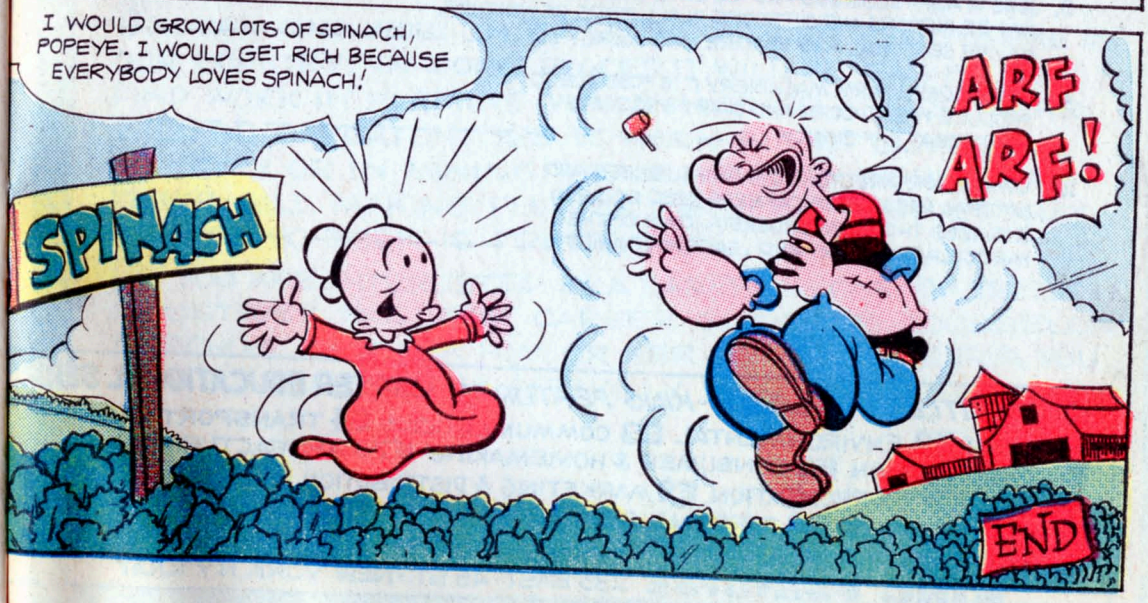

GEOLOGISTS USE MANY DIFFERENT TOOLS TO LOOK FOR ORE. THEY HAVE GEIGER COUNTERS TO DETECT RADIOACTIVE ORES, SUCH AS URANIUM, X-RAY DIFFRACTOMETER WHICH ANALYZES THE STRUCTURE OF MINERALS AND THE OLD-FASHIONED PROSPECTOR'S PICK TO BREAK OFF PROMISING ROCK SPECIMENS.
SOME GEOLOGISTS EXPLORE ROCKS AND MARINE FORMATIONS, SEARCHING FOR MINERALS ON THE OCEAN FLOOR.
THERE ARE MORE THAN 23,000 MEN AND WOMEN WORKING AS GEOLOGISTS. MOST OF THEM WORK IN PRIVATE INDUSTRY.


MOST GEOLOGISTS EARN A BACHELOR'S DEGREE WITH A MAJOR IN GEOLOGY AND THEN CONTINUE THEIR STUDIES TO EARN A MASTER'S DEGREE. MOST SUCCESSFUL GEOLOGISTS IN HIGH-LEVEL RESEARCH AND ADMINISTRATIVE POSITIONS HAVE A PH. D. IN GEOLOGY.
RUMBLE


MOST GEOLOGISTS FIND THEIR WORK VERY INTERESTING AND ARE WELL REWARDED BY IT.

HEH HEH!


YOU LEARNED ABOUT A LOT OF DIFFERENT JOBS IN THIS FIELD, SWEE'PEA. WHICH ONE DO YOU THINK YOU LIKE MOST?
I THINK I WOULD LIKE TO BE A FARMER, POPEYE.


I WOULD GROW LOTS OF SPINACH, POPEYE. I WOULD GET RICH BECAUSE EVERYBODY LOVES SPINACH!
SPINACH
ARF ARF!
END

CAN YOU ANSWER THESE ?

1. LIST FIVE JOBS IN AGRI-BUSINESS AND NATURAL RESOURCES CAREERS YOU MIGHT ENJOY. NEXT TO EACH JOB LIST THE TRAINING YOU WOULD NEED. YOU CAN FIND THE ANSWERS IN THIS BOOK.

JOB	TRAINING

2. LIST SIX AGRI-BUSINESS AND NATURAL RESOURCES JOBS YOU DID NOT KNOW ABOUT.

_____ _____ _____

_____ _____ _____

3. AGRI-BUSINESS AND NATURAL RESOURCES JOBS ARE POSSIBLE WITH TRAINING WHICH MIGHT INCLUDE:

CHECK ONE →	YES	NO	CHECK ONE →	YES	NO
HIGH SCHOOL DIPLOMA			LAND-GRANT UNIVERSITY DEGREE		
VOCATIONAL SCHOOL DIPLOMA			EVENING AND EXTENSION COURSES		
JUNIOR COLLEGE DEGREE			ON THE JOB TRAINING		
4 YEAR COLLEGE DEGREE			APPRENTICESHIP TRAINING		
GRADUATE DEGREE			AGRICULTURAL COLLEGE DEGREE		
VETERINARIAN'S DEGREE			SPECIALIZED TRAINING		

4. CAREER OPPORTUNITIES IN AGRI-BUSINESS AND NATURAL RESOURCES CAREERS ARE POSSIBLE IN:

CHECK ONE →	YES	NO	CHECK ONE →	YES	NO
FARMS			MINES		
FORESTS			RESEARCH		
LOCAL, COUNTY AND FEDERAL AGENCIES			OCEANOGRAPHY		
PRIVATE INDUSTRY			OIL COMPANIES		
LAND-GRANT UNIVERSITIES & COLLEGES			HORTICULTURE		

	CHECK ONE	YES	NO
5. ALL CAREERS IN AGRI-BUSINESS AND NATURAL RESOURCES ARE WORKING TOWARD GETTING A PRODUCT FROM THE EARTH OR THE SEA.			
6. HOW AND WHERE TO GET THE PRODUCT AS WELL AS THE SAFETY REQUIREMENTS NEEDED ARE IMPORTANT PHASES OF AGRI-BUSINESS AND NATURAL RESOURCES WORK.			
7. THERE ARE JOB OPPORTUNITIES FOR A WIDE RANGE OF ABILITIES, MEN AND WOMEN, YOUNG AND MATURE, IN AGRI-BUSINESS AND NATURAL RESOURCES.			
8. JOBS IN AGRI-BUSINESS AND NATURAL RESOURCES MAY BE INDOORS AND OUTDOORS, IN ALL KINDS OF WEATHER, MAY BE SEASONAL AND REQUIRE LONG HOURS.			
9. WITH MODERN FARM MACHINERY IT IS POSSIBLE TO PRODUCE WHEAT, CORN AND DAIRY PRODUCTS WITH GREAT EFFICIENCY.			
10. OWNERS OR DIRECTORS OF AGRI-BUSINESS AND NATURAL RESOURCES CAREERS NEED SKILLS IN BUSINESS, THOROUGH UNDERSTANDING OF THE PARTICULAR INDUSTRY AND LEADERSHIP ABILITY.			

OTHER TITLES AVAILABLE - KING FEATURES CAREER EDUCATIONAL SERIE
E1 HEALTH E2 ENVIRONMENTAL E3 COMMUNICATIONS E4 TRANSPORTATION
E5 CONSTRUCTION E6 CONSUMER & HOMEMAKING E7 MANUFACTURING
E8 HOSPITALITY & RECREATION E9 MARKETING & DISTRIBUTION E10 BUSINESS & OFFICE
E11 PUBLIC SERVICE E12 PERSONAL SERVICE E13 MARINE SCIENCE E14 FINE ARTS &
HUMANITIES E15 AGRI-BUSINESS & NATURAL RESOURCES
KING Features 235 EAST 45 ST.-NEW YORK, N.Y. 10017

HEY, KIDS-

MILLIONS OF AMERICANS WORK IN FARMING, MINING AND THE LUMBERING INDUSTRY. THERE ARE JOBS FOR HIGH SCHOOL GRADUATES AND THOSE WITH COLLEGE DEGREES. YOUNG AND OLD, MEN AND WOMEN, SKILLED, UNSKILLED AND HANDICAPPED PEOPLE ALL FIND JOBS IN THESE INDUSTRIES.

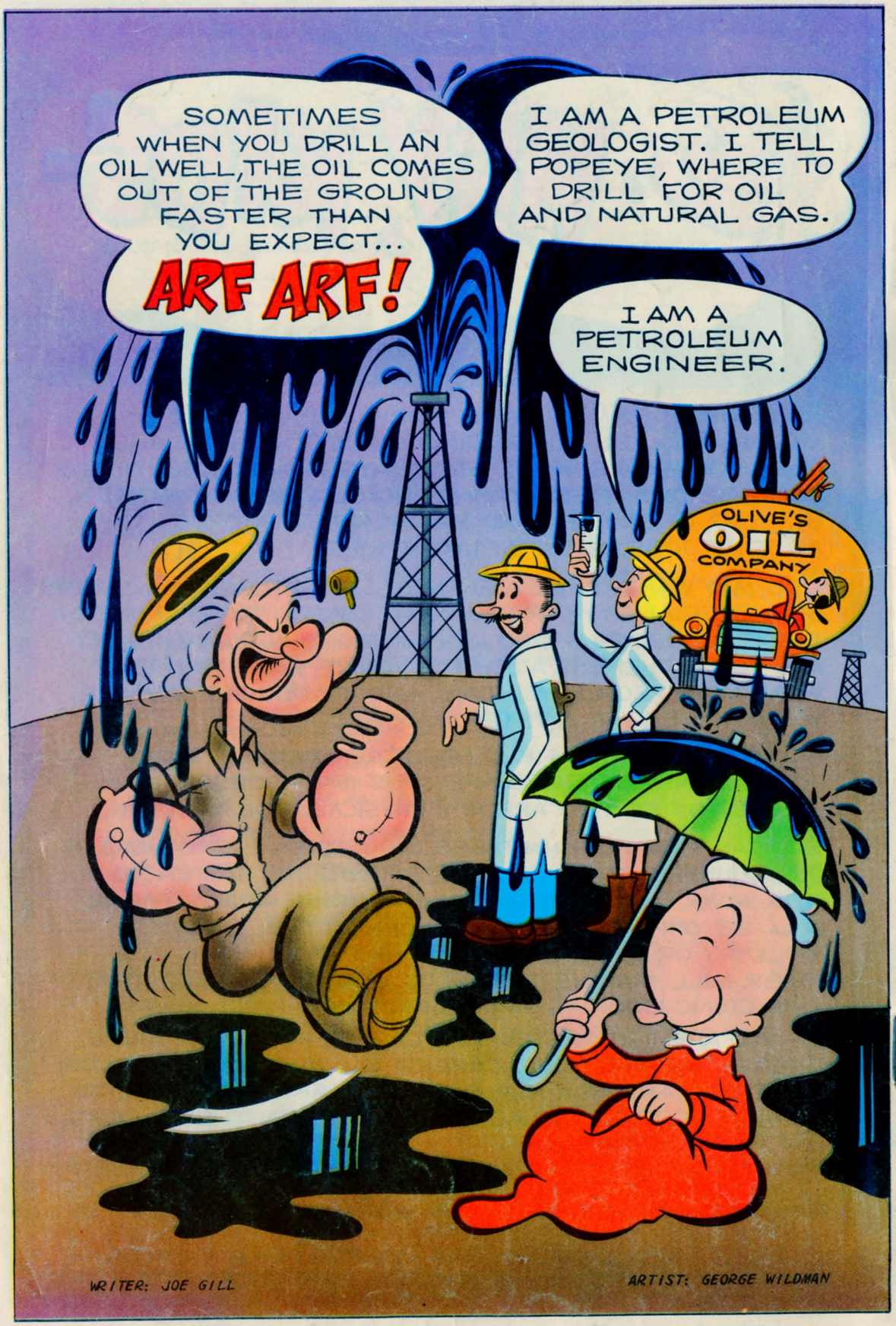
YOU MAY WANT TO BE A FARMER, LUMBERJACK, MINER OR SOIL SPECIALIST -- OR YOU MIGHT LIKE TO TEACH IN ONE OF THESE SUBJECTS. IF YOU LIKE WORKING WITH MACHINERY AND TOOLS, THERE IS A JOB FOR YOU. IF YOU'D RATHER WORK WITH PEOPLE, YOU CAN. AND IF YOU LIKE ANIMALS, YOU MAY BECOME A VETERINARIAN.

SOME JOBS IN THIS FIELD ARE STRENUOUS, OUTSIDE OCCUPATIONS BUT THERE ARE JOBS IN OFFICES AND LABORATORIES THAT ARE NOT PHYSICALLY DEMANDING.

YOU CAN FIND WORK IN THESE INDUSTRIES EVERYWHERE IN OUR COUNTRY. IN SOME PLACES IT WILL BE EASIER TO FIND WORK IN FARMING WHILE IN OTHER AREAS THERE WILL BE OPPORTUNITIES TO WORK IN THE LUMBER INDUSTRY OR IN MINING. YOU MIGHT EVEN WORK IN A PAPER MILL MAKING PULPWOOD INTO THE PRODUCT THAT THIS COMIC BOOK IS PRINTED ON.

IF YOU ARE INTERESTED IN A CAREER IN ONE OF THESE INDUSTRIES, SEE YOUR CAREER GUIDANCE COUNSELOR IN SCHOOL AND ASK HIM OR HER TO ARRANGE FOR YOU TO VISIT PEOPLE WHO ACTUALLY WORK IN THESE JOBS.

Your Pal, Popeye


SOMETIMES WHEN YOU DRILL AN OIL WELL, THE OIL COMES OUT OF THE GROUND FASTER THAN YOU EXPECT...
ARF ARF!
I AM A PETROLEUM GEOLOGIST. I TELL POPEYE, WHERE TO DRILL FOR OIL AND NATURAL GAS.
I AM A PETROLEUM ENGINEER.
OLIVE'S OIL COMPANY
WRITER: JOE GILL
ARTIST: GEORGE WILDMAN